★ FITCH ★ ORIGINAL STEAM-BOAT SUPPORTED ★

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THE ORIGINAL STEAM-BOAT SUPPORTED;

OR,

A REPLY

TO

MR. JAMES RUMSEY'S PAMPHLET.

SHEWING THE

TRUE PRIORITY

OF

JOHN FITCH,

AND THE

FALSE DATINGS, &c.

OF

JAMES RUMSEY.

PHILADELPHIA:

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M DCC LXXXVIII.

PREFACE.

AGREEABLY to a promiſe made in the Independant Gazetteer, I now preſent to the Public a reply to the Pamphlet publiſhed by Mr. Rumſey, of Virginia,—and as I have no matter to conceal, or diſguiſe, and wiſh my readers to have a full and fair view of the whole controverſy, I have reprinted and annexed Mr. Rumſey's Pamphlet, which will diſcover to every impartial perſon who will take the trouble to examine the ſubject, that he hath no ſort of juſt pretenſion to the claims he hath exhibited.—His ſkill in the mechaniſm of a Steam Engine, may poſſibly be greater than mine, and in the article of CONDENSATION I freely acknowledge he is my ſuperior, having acquired the art of *condenſing* (with the daſh of his pen) one *whole year* in the compaſs of *ſix days*.

JOHN FITCH.

Philadelphia, 10th. May, 1788.

THE

THE ORIGINAL STEAM-BOAT SUPPORTED, &c.

IT is the duty of every man not only to avoid the commiſſion of a crime, but ſo to conduct himſelf through life as to bear the ſtricteſt ſcrutiny.

In a Pamphlet publiſhed by Mr. James Rumſey and lately circulated in this City, as well as probably in other ſtates, I am charged as the perpetrator of crimes attrocious in their nature, but of which my conſcience fully acquits me. It is an exerciſe of malevolence in the extreme thus publicly to prefer charges againſt an innocent perſon without previouſly knowing or enquiring for the defence of the ſuppoſed offender, and ſhews an inability in the accuſer to ſupport his charges. Unfortunately for Mr. Rumſey I truſt, we are now before an impartial Public, where Juſtice, unbiaſſed by party or undue influence, will decide between us—Concious of my conduct, in the proſecution of this buſineſs, being that of an honeſt man, it is incumbent on me to recite the circumſtances, and facts relative thereto.

I confeſs the thought of a Steam Boat, which firſt ſtruck me by mere accident about the middle of April 1785, * has hitherto been very unfortunate to me; the perplexities and embarraſſments through which it has cauſed me to wade, far exceed any thing, that the common courſe of life ever preſented to my view. After pondering ſome days on the thought I made a rough draught, but not daring to truſt my own opinion too far, I conſulted Mr. Daniel Longſtreth, the Reverend Nathaniel Irvin and ſundry other Gentlemen of Bucks county, Pennſylvania.

About the beginning of June, 1785, I went to Philadelphia and ſhewed it to Dr. Ewing, Mr. Patterſon and other reſpectable characters in the city, from whom I met with no diſcouragement. In June and July I formed models and in Auguſt laid them before Congreſs, as will appear on their Files. In September

* *Vide* N°. 1 *and* 2.

tember I preſented them to the Philoſophical Society, as per certificate

N°. 3.

Philadelphia, 1785.

September 27th. 1785. At a ſpecial meeting of the American Philoſophical Society:

A Model, accompanied with a drawing and deſcription of a machine for working a boat, againſt the ſtream, by means of a Steam Engine, was laid before the ſociety, by JOHN FITCH.

At a meeting of the American Philoſophical Society, on December 2d. 1785.

A Copy of the drawing and deſcription of a machine for working a boat againſt the current, which, ſome time ago, was laid before the ſociety by Mr. JOHN FITCH, he, this evening, *preſented* to them.

Extract from the Minutes,
SAMUEL MAGAW,
One of the Secretaries.

In October I called on the ingenious Mr. Henry of Lancaſter to take his opinion of my drafts who informed me, that I was not the firſt perſon who had thought of applying Steam to veſſels, that he had converſed with Mr. Andrew Ellicott as early as the year 1775, and that Mr. Paine, author of Common Senſe, had ſuggeſted the ſame thing to him in the winter of 1778, that ſome time after, he (Mr. Henry) thinking more ſeriouſly of the matter, was of opinion it might be eaſily perfected and accordingly made ſome drafts which he propoſed to lay before the Philoſophical Society and which he then ſhewed me, but added as he had neglected to bring them to public view and as I had firſt publiſhed the plan to the world he would lay no claim to the invention. The following I have been favoured with from Mr. Ellicott:

N°. 4.

Baltimore, April 26th, 178[illegible].

I do hereby certify, that early in the year one thouſand, ſeven hundred and ſeventy five, Mr. William Henry, of Lancaſter, converſed with me on the ſubject of *ſteam*, and intimated that he thought it might be advantageouſly applied to the Navigation of Boats.

(Signed)
ANDREW ELLICOTT.*

From Lancaſter I went to the Aſſembly of Virginia, firſt waiting on Governor Johnſon of Maryland, who, notwithſtanding the letters he has ſince written in favour of Mr. Rumſey, acknowledged a merit in my invention and that it ought to be encouraged

* *Vide Mrs. Henry's Certificate*, N°.

couraged as will preſently appear. During my journey through Maryland in October, I paſſed through Frederick Town, and every where publiſhed my Plan. In Virginia I waited on his Excellency General Waſhington, who in the courſe of converſation informed me, that the thought of applying Steam was not original, that Mr. Rumſey had mentioned Steam to him, but nothing that paſſed in the converſation with General Waſhington had the leaſt tendency to convey the idea of Mr. Rumſey's relying on Steam, and General Waſhington's letter, page 10, in Mr. Rumſey's pamphlet clears up the matter—for the General himſelf did not conceive any ſuch thing. Knowing that the thought of applying Steam to Boats had been ſuggeſted by other gentlemen *long before*, I left his Excellency General Waſhington with all the elated proſpects that an aſpiring projector could entertain, not doubting but I ſhould reap the full benefit of the project; for although I found that *ſome* had *conceived* the thought before, yet I was the firſt that ever exhibited a plan to the public; and was fully convinced that I could not interfere with Mr. Rumſey, otherwiſe the known candor of General Waſhington muſt have pointed out to me ſuch interference. I immediately applied to the Legiſlature of Virginia for aſſiſtance, to execute my plan, who ſignified their wiſh to encourage my deſigns, but that the ſtate of their finances prevented it—the then Governor of the ſtate, Patrick Henry, Eſq. received from me an obligation with proviſion that if I procured in that ſtate a ſale for one thouſand of my Maps of the N. W. part of the United States, at 6/8 each, I ſhould exhibit a Steam Boat on the waters of Virginia, within nine months or forfeit and pay to the ſtate of Virginia, £. 350. as appears by the following certificate.

N°. 6.

I certify that John Fitch has left in my hands a bond payable to the Governor for the time being for £350, conditioned for exhibiting his ſteam Boat when he receives ſubcriptions for 1000 of his maps, 6/8 each.

November 16th. 1785.

(Signed)

P. HENRY.

I then returned to Maryland and acquainted Governor Johnſon of my expected aſſiſtance in Virginia and that I intended applying to the Aſſembly of Maryland then ſitting, to promote and patronize my ſcheme—Governor Johnſon gave me the following Letter to General Smallwood, the then Governor of the ſtate.

N°. 7.

SIR, *Frederick Town, November 25, 1785.*

Mr. John Fitch of Bucks county, in Pennſylvania, called on me in his way to Richmond; he has gone through a variety of ſcenes

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in the back country, which has enabled him to collect a knowledge of a great part of the new ſtates, on which and other helps he has made a map uſeful and entertaining, his ingenuity in this way ſtrongly recommends him, but his genius is not confined to this alone, he has ſpent much thought on an improvement of the Steam-engine, by which to gain a firſt power applicable to a variety of uſes, amongſt others to force veſſels forward in any kind of water; if this engine can be ſimplified, conſtructed and made to work at a ſmall expence, there is no doubt but it will be very uſeful in moſt great works, and amongſt them in ſhip building. Mr. Fitch wants to raiſe money to make an experiment on Boats, the countenance that he has met with in Virginia he hopes will enable him to do it, he wiſhes alſo to make other experiments, and is willing to enter into engagements to apply a large proportion of the ſales of his maps, his principle fund. I believe his paſſion for this improvement will be ample ſecurity for his applying the money in that way;—all that I have to requeſt of you Sir, is, that you will give him an opportunity to converſe with you, you will ſoon perceive he is a man of real genius and modeſty, your countenancing him will follow of courſe.

I am Sir,

your Excellency's

moſt obedient and moſt humble Servant,

(Subſcribed) THOS. JOHNSON.

His Excellency Governor Smallwood.

Favour of

Mr. Fitch.

From hence it plainly appears that Governor Johnſon could not at that time have any idea of my ſcheme interfering with Mr. Rumſey's, as ſeems to be now inſinuated in that gentleman's letter to Mr. Rumſey, N°. 14 of his Pamphlet.

I attended the ſeſſion of the legiſlature about three weeks after receiving this letter, and on my petition for aſſiſtance to execute my plan, they made me the following report or nearly in theſe words, (as may appear by examining their minutes) "However deſirous it is for liberal and enlightened legiſlatures to encourage uſeful arts, yet the ſtate and condition of our finances are ſuch that there can be no advance of Public money at preſent." From this report it is proved beyond all doubt that the Aſſembly of Maryland did not conceive my plan the ſame as Mr. Rumſey's—finding that I was undoubtedly the firſt perſon in America that could be termed the inventor of a Steam Boat, either agreeable to cuſtom, or equity, I thought it prudent to apply to the different ſtates for the excluſive priviledges for the emoluments of ſuch invention, which was granted by New-Jerſey in March 1786, by Deleware, New York and Pennſylvania in the winter and ſpring following, and by Virginia in October 1787.

I have

I have from the time of my firſt thought purſued my ſcheme with unremitted application, without a ſuſpicion of an interruption, until the circulation of Mr. Rumſey's invidious Pamphlets, the contents of which I now find it neceſſary next to take under conſideration, not doubting but that the deſign and tendency of that production will be a ſufficient apology for the plainneſs with which I ſhall treat it.

Mr. Rumſey ſays in Page 2, "That in the month of September, 1784, he exhibited the model of a Boat to his Excellency General Waſhington, at Bath in Berkeley County, calculated for ſtemming the current of rapid rivers only, conſtructed on principles very different from (his) preſent one; ſatisfied of the experiment of her making way againſt a rapid ſtream by *the force of the ſtream*, the General was pleaſed to give me a moſt ample certificate of her efficacy." Here it is to be obſerved, that no mention was made to General Waſhington of *ſteam*, at the time of ſuch exhibition; the principles upon which the Boat was propelled, was entirely unconnected with, and diſtinct from, ſteam; being ſimply a model, propelled by water wheels, cranks and ſetting poles; a mode which was many years ago tried on the river Schuylkill by a Farmer near Reading, but without ſucceſs. From an exhibition of this plan it was that Mr. Rumſey procured the certificate from General Waſhington, and on that certificate were Mr. Rumſey's laws founded. In his petitions to the ſeveral legiſlatures, he prayed for no excluſive right, for the uſe of Steam Boats; neither did he make mention of Steam, to their committees; or even ſuggeſt an idea of the kind: as proof of which, I offer the following petition to the Aſſembly of Pennſylvania, the certificate from General Waſhington, accompaning it, and the certificate of Manuel Eyre, Eſquire, who was one of the committee of Aſſembly, who reported in Mr. Rumſey's favor.

No. 8.

I have ſeen the model of Mr. Rumſey's Boats conſtructed to work againſt ſtreams; examined the powers upon which it acts, been eye witneſs to an actual experiment, in running water of ſome rapidity; and give it as my opinion (although I had little faith before) that he has diſcovered the art of working Boats by mecaniſm and ſmall manual aſſiſtance againſt rapid currents; that the diſcovery is of vaſt importance, may be of the greateſt uſefulneſs in our inland navigation and if it ſucceeds, of which I have no doubt, that the value of it is greatly enhanced by the ſimplicity of the works, which when ſeen and explained, may be executed by the moſt common machanic.

Given under my hand at the Town of Bath, County of Berkeley, in the State of Virginia, this 7th. of September 1784.

GEORGE WASHINGTON.

N°. 9.

To the Honourable the Repreſentatives of the State of Pennſylvania, in General Aſſembly met.

GENTLEMEN,

Whereas your petitioner has formed a plan for facilitating the navigation of rapid rivers, he therefore doth propoſe to conſtruct a certain ſpecies of Boats of the burthen of ten tons which ſhall ſail or be propelled by the combined influence of certain mechanical powers thereto applied, the diſtance of between twenty-five and forty miles per day, againſt the current of a rapid river, notwithſtanding the velocity of the water, ſhould move at the rate of five miles per hour and upwards, with the burthen of ten tons on board to be wrought at no greater expence than that of three hands, and as a premium for ſo uſeful an invention, your petitioner prays for an act to paſs this honourable houſe, granting to your petitioner, his heirs and aſſigns, the ſole and excluſive right of conſtructing, navigating and employing boats conſtructed upon his new invented-model upon each and every creek, river, bay, inlet and harbour within the limits and juriſdiction of this commonwealth, for and during the term of ten years, fully to be compleated and ended, to be computed from the firſt day of January next, provided always that the legiſlature of this commonwealth may at any time within the term aforeſaid aboliſh the excluſive right herein prayed for, by the payment of ——— pounds in gold or ſilver. And your petitioner, as in duty bound, ſhall pray.

JAMES RUMSEY.

The foregoing is a true copy of the original petition remaining on the files of the General Aſſembly and read in the houſe November 26, 1784.

J. SHALLUS, *Aſt. Clk.*

N°. 10.

Philadelphia, the 6th. May, 1788.

This may certify, that I the ſubſcriber was in Aſſembly for the year 1784, and was appointed one of the committee to report on Mr. James Rumſey's petition for his Boat to go againſt the ſtreams of rapid rivers and that there was no mention nor any idea held up to the committee that it was to be propelled by the force of ſteam.

(Signed)

MANUEL EYRE.

Now I aſk whether it does not amount to a poſſitive proof that Mr. Rumſey had no ſort of Reference to, or dependance on, Steam. General Waſhington ſays, " It is ſo *ſimple* that it may be executed by the moſt *common mechanic*;" which certainly his Excellency

cellency would not have ſaid of a Steam-engine; a machine, that has coſt me two years to underſtand, and compleat. If we examine the Petition, we ſhall find, that it confirms the General's idea of ſimplicity; for Mr. Rumſey ſays "it may be wrought at no *greater expence* than that of *three* hands," plainly indicating, that the *expence of fire* was not in contemplation; and to put the matter out of all doubt, Mr. Eyre declares, "*There was no idea* held up to the committee that it was to be propelled by *Steam.*"

All Mr. Rumſey's laws were obtained, in conſequence of his model, ſhown to General Waſhington at Bath; which, as I have ſaid, was nothing but water wheels, cranks and ſetting poles; therefore he could have no pretenſion to the uſe of Steam, under thoſe laws. With the ſame propriety, his claim might extend to every power, and every machine in the United States; as ſoon as any man had invented one that would ſuit his purpoſe. So that upon his plan of law making, no other man would be ſafe in expending his money, but all muſt be ſwallowed up by his pretendedly ambiguous laws. But I am happy in knowing, that *his laws*, as well as *his claims*, cannot interfere with *mine*; for had he profeſſed any reliance on Steam; or any intention to apply it to his boats, he certainly would not have neglected inſerting, ſo important a part of the ſcheme, in his petitions to the different legiſlatures. Nor would he have prayed to be inveſted with the excluſive privilege, to uſe boats, conſtructed on ſuch different principles from thoſe he really intended to purſue. In Mr. Rumſey's act paſſed in Pennſylvania, it is ſtiled "The excluſive right of conſtructing, navigating and employing boats built and to be built on his new invented mode," and this new invented mode (viz. cranks, water wheels and ſetting poles) is all he was entitled to under that law. Can it be ſuppoſed that the legiſlatures would not have included Steam in their laws, if they had been informed by Mr. Rumſey that it was his grand dependance; the eſſential, the vital part of his ſcheme, as he now profeſſes. That they had no ſuch intimation given them, is very evident, from their encouragement to me; and the laws ſince paſſed, are the fulleſt proofs of the received meaning of Mr. Rumſeys petitions, viz. that they had no connection with Steam. And that Mr. Rumſey did not think himſelf miſunderſtood, muſt certainly be granted; becauſe he made no objection to any of my petitions, as interfering with his Laws, which, agreeable to his own declarations, were founded on principles very different from a Steam-boat. That he had no claim to Steam under his laws is evident, from his confeſſion in page 4, line 31, where he ſays "I find my idea of Steam was *nearly matured* before ſteam had ever entered his head by his confeſſion to Governor Johnſon viz. April 1785."—Now can it be ſuppoſed Mr. Rumſey had made conſiderable *improvements* on Steam-engines in 1784, or

 that

that he had obtained laws ſecuring a right to the uſe of Steam to Boats, when at the time of his petitioning for, and the paſſing of thoſe laws, he confeſſes his idea of Steam was not *matured.*

He ſays in page 3, line 1, " In the courſe of that fall and winter (of 1784 he made progreſs in ſome Steam-engines, and page 16, line 7, of Governor Johnſon's letter, " I think in October 1785, you told me you relied on Steam for your firſt power, and wiſhed me to promote your having ſome cylinders caſt at my brother's and my works; the attempt did not ſucceed." Speaking of General Waſhington, the Governor adds " But the General ſeems to have thought it an *immatured idea that he did not imagine you then relyed on*" (viz. in November 1784.) Theſe two laſt acknowledgements on the part of Mr. Rumſey, muſt deſtroy the facts alledged in the firſt, viz. that " He made progreſs in Steam-engines in the fall and winter of 1784." For the information given to General Waſhington in confidence reſpecting the boat, was ſuch that the General " Did not think he then relyed on Steam;" which is fully confirmed, by his making uſe of the General's certificate to the Aſſemblies, wherein the diſcovery is treated as being " enhanced by its ſimplicity, and may be executed by the moſt common mechanic" which ſurely no perſon would ſay of a Steam-engine.

His application to Governor Johnſon for caſtings for a Steam-engine, is inſinuated to have been in October or November 1785, which I muſt deny, and refer to the Governor's own letter for the proof; being confident that no ſuch application had been made to that gentleman by Mr. Rumſey, *previous* to my obtaining the letter of Recommendation to Governor Smallwood. But even had it been true it goes no further back than October or November 1785, which was the very time I was publiſhing my plan through Pennſylvania, Maryland and Virginia, and was near three months after the time I laid it before Congreſs—And yet this attempt to have a cylinder caſt, at Governor Johnſon's works in October or November 1785, is the firſt eſſay towards bringing forward a Steam-engine, that is offered in proof, admitting it to have been at the time Governor Johnſon ſuppoſes, which I cannot allow for reaſons I ſhall preſently offer in addition to what I have already ſaid on this head. Then how are we to reconcile the aſſertion of Mr. Rumſey's having made conſiderable progreſs in Steam-engines in the " fall or winter of 1784," when it appears his firſt attempt (by this account) was not made until after October or November 1785 as mentioned by Governor Johnſon's letter, I ſhall hereafter ſhow, to a demonſtration, beyond all poſſibility of doubt, that this ſame engine, ſaid to have been compleatly made in Frederick town in December 1785, *was not begun* until March 1786. On comparing Governor Johnſon's letter, ſent under my care to General Smallwood, dated November 25th. 1785, (a conſiderable time after I firſt explained to him my model

Nov. 1785

del and acquainted him of my intentions of purſuing the ſcheme) with his letter to Mr. Rumſey, dated December the 18th. 1787, it muſt unavoidably call in queſtion the *memory* or *candour* of the writer, the *latter* I moſt certainly ought to acquit, and ſhould have been happy had I obtained the leaſt *explanation* on this head, when I lately made a journey to his houſe; expreſsly to procure it; poſſibly it may ſtill be received. If Governor Johnſon knew, and believed the legal priority of Mr. Rumſey's claim, to a Steam-boat, and was entruſted with his ſecret, how was it poſſible he could have encouraged a man "*of real genius and modeſty*" (as he was pleaſed to term me) to proceed on an experiment, which terminate as it would, muſt inevitably end in loſs and diſappointment. For ſhould the experiment fail, which was then thought very doubtful, the ſmall fund, which I ſhould raiſe by the ſale of my maps, muſt likewiſe fail; for I was to expend it in Virginia as appears by Governor Henry's certificate page 5. Should the experiment ſucceed to the utmoſt of my wiſhes, I ſhould ſuffer more ſeverely, not in my money and time only, but in my reputation; and meet the treatment of a man treſpaſſing on the rights of a fellow citizen, who had a law in his favour. Had Governor Johnſon at the time he encouraged me, known the priority of claim to be fairly and juſtly in Mr. Rumſey, had he been *then* in poſſeſſion of his ſecret, or had he believed any title veſted in Mr. Rumſey to the excluſive uſe of Steam, under the law of Maryland, ſo recently paſſed in his favor, the Governor certainly would not have requeſted a gentleman of General Smallwood's rank, to countenance me, not only to treſpaſs on the rights of Mr. Rumſey, but to violate a law, which as Governor of the ſtate he was bound to ſupport. Another circumſtance corroborates my aſſertion of miſrelation of facts, as to time.

It will be recollected that Governor Johnſon's letter recommending me ſo very minutely and warmly to the patronage of Governor Smallwood, was dated 25th. November 1785, and in his letter to Mr. Rumſey, the Governor ſays, "In October or November 1785, you told me you relied on Steam for your firſt power and wiſhed me to promote your having ſome caſtings at my brother's and my works; the attempt did not ſucceed—I conſidered myſelf under an obligation to ſecreſy, 'till in the progreſs of making copper cylinders in Frederick Town, *ſome time after*, when I found that the deſigned purpoſe of the cylinder was a *ſubject of pretty general converſation.*"—Now the Governor's letter in my favour was dated 25th. November 1785, and the whole machinery is ſworn to have been compleated on the 1ſt. December following, only ſix days after the time of my getting this letter of recommendation—and as the cylinder was a ſubject of "pretty general converſation," I could not have been kept in ignorance by the Governor from his "Obligation to ſecreſy" becauſe it was no longer a ſecret at Frederick-town.

The

The thing was impoſſible in its nature, that the cylinders and copper works ſhould have been making, and a ſubject of general converſation, in Frederick-town, on the 25th. day of November 1785, the time I was obtaining my letter of introduction to Governor Smallwood, in that very town; and muſt have heard it myſelf, if Governor Johnſon had been ſo diſingenuous as to conceal it from me; which is abſurd to ſuppoſe; for I made *my* buſineſs publicly known in that town, and therefore, if Mr. Rumſey's cylinders were the ſubject of general converſation, I muſt have heard it from every quarter; therefore it clearly follows, that the converſation about caſting of the cylinders, the obligation of ſecreſy, and the general converſation about the deſign of the cylinders in Frederick-town, could not have happened in the year 1785.—If Mr. Rumſey had made Governor Johnſon his confident "In October or November 1785," it is highly improbable that he would ſo far have deceived Mr. Rumſey and me, as to encourage my purſuit of a ſimilar nature, within ſo ſhort a time as ſix days of its being compleated. —And it is equally improbable that Mr. Rumſey ſhould have communicated this ſecret and requeſted his aſſiſtance in procuring caſtings *immediately after* my being with the Governor, as there was not time for it—the Engine being ſworn as I have ſaid to have been all compleated *ſix days* after that viſit—Then the following concluſion may be ſafely drawn, that Governor Johnſon did at ſome *ſubſequent day* (ſo long after as that he forgot the letter he had given me) offer to aſſiſt Mr. Rumſey with caſtings; which not ſucceeding, an application was made to copperſmiths in Frederick-town the enſuing ſpring, who in the courſe of the ſummer 1786, delivered their work to Mr. Rumſey.—About *this time* it was that the matter became a ſubject of "*general converſation;*"—and if *winter* ſtopped the putting the whole machinery into motion as ſworn to by Meſſrs. Barns and Morrow, it was the *winter of* 1786, which is *long after* my boat was built, and my model of a Steam-engine compleated.—Of this my readers will ſoon be fully convinced—and a further weighty proof is—that as Mr. Rumſey profeſſes his hurrying on his engine, was on account of my ſetting up pretenſions, it cannot be believed that he would ſuffer my petition to lay before the aſſembly of Maryland, and be reported on in my favour about the 20th. December 1785, *nineteen days* after he ſays his boat and Engine were finiſhed—Mr. Foy the member from Frederick-town muſt have told the tale, and laid in a claim for his countryman,—but I repeat it again, that I was in that very Frederick-town on my way to the Aſſembly in the *fall of* 1785, every where publiſhing my ſcheme, and no Engine was began there during that year, nor until March following, as will be fully ſhown—but before I come to my proofs I wiſh to confute him out of his own writings.

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Let me purſue his explanation ſtill further, and aſk, what could be the uſe of *ſecreſy* in this buſineſs, if Mr. Rumſey, as he alledges, was ſecured in the uſe of the invention by law? Could he expect any countenance from the public, for a ſcheme wrapped up in ſecreſy and which is confeſſed by Governor Johnſon to have remained until after I had publiſhed *my plan*, both in Maryland and Virginia—Mr. Rumſey and his confidential friends might have died, and then no advantage could have ariſen to the community; and until ſuch advantage was publicly imparted, certainly nothing could be expected from the public.

In page 16 he inſerts part of a letter from general Waſhington in anſwer to his of the 10th. March 1785: "It gives me much pleaſure to find by your letter, that you are *not leſs ſanguine* in your boat project, than when I ſaw you at Richmond, and that you have made ſuch *further diſcoveries* as will render them more extenſively uſeful than was at firſt expected"—but ſtill it is plain that the General only alluded to the ſetting pole plan, for in his anſwer to Governor Johnſon (even after my petition was before the Aſſembly of Maryland) he *ſtill* thought that Mr. Rumſey had "No reliance on Steam"—The General's ſaying that he thought Mr, Rumſey's idea of ſteam was "*Immature*" in November 1784 (the time they were at Richmond,) is a proof that Mr. Rumſey's "*Being not leſs ſanguine*" muſt have alluded to his *ſetting pole* ſcheme, becauſe no man can be ſaid to be *ſanguine* in any thing of which he has but "An *immatured* idea;" and "*Further diſcoveries*" will not apply to Steam, becauſe *ſteam* could be no *new* diſcovery, and was mentioned to the General at Richmond: nor is any thing mentioned of Steam in the General's Letter, at leaſt in the extract. It is reaſonable to ſuppoſe, if Steam had been the dependable diſcovery, it would have been treated on more largely, and have produced a more pointed anſwer; the truth is, Mr. Rumſey placed no dependance on Steam, until my plan came forward, and his own had failed; conſcious of the weakneſs of his claim, and the futility of his arguments to ſupport it, he found that ſomething more was neceſſary than merely an "*Immatured idea*;" therefore to add weight to his plea, he endeavours to eſtabliſh himſelf under the ſolemnity of oaths, and attempts to prove, that the machinery for his Steam-engine, was executed in Baltimore and Frederick-town, ſo as to be compleated and put together on the *1ſt. of December* 1785. Theſe ſolemn and poſitive declarations are contained in the depoſitions of Charles Morrow and Joſeph Barns (N°. 11 and 12 of his pamphlet) who are probably intereſted in the ſcheme. The reader will pleaſe to examine theſe depoſitions; they are produced to ſupport facts, which he is conſcious *ought* to have exiſted at the time they ſpecify, otherwiſe his pretenſions would conſequently fall. Theſe two witneſſes teſtify to abſolute facts, and yet affix different periods

of

of time for one and the ſame tranſaction. Page 13, line 14, of Charles Morrow's depoſition, he ſays "About the firſt of December (1785) it appears to the ſaid Charles that the *whole* of the machinery was ready to be fixed to the boat which came down to the falls of Shanandoah for experiment; but the ice then commencing prevented it for the winter:" and line 28 of the ſame depoſition he ſays, "In the ſpring of 1786, the machinery was put on the boat and the firſt trial made, ſaid Charles being on board." Page 15, line 11, of *Joſeph Barns's* depoſition he ſays, "In December (1785) it was *put on the boat* at Shanandoah falls," theſe different declarations, or different times affixed, at which the machinery was *put on the boat*, of themſelves tend much to deſtroy the validity of their oaths; for the time the machinery was put on board, muſt have been a fact, ſo notorious, that it could not admit of a miſtake, in a mind properly impreſſed with the importance of an oath. In page 10 & 11 William Aſkew ſwears that Mr. Rumſey's machinery will not weigh more than eight hundred pounds, and that he is well convinced it may be made for £20. It is a well know fact that of Mr. Rumſey's machinery, the greateſt part, muſt conſiſt of copper or braſs, ſuch as cylinders, tubes, cocks and valves, together with curious wrought iron; now 800 pounds (were it all made of *Iron*) could not coſt leſs than double the ſum. As this evidence is not brought to prove any thing about Mr. Rumſey's *priority* it is of no importance, and the abſurdity it contains might have been ſpared. Whether *his* machine or *my* machine are beſt, is nothing to the purpoſe; I have been daily altering, and never watched *his* motions and blunders, as it is evident he did *mine*. He, it ſeems made a ſecret of his doings, whilſt mine were open to all the world.

It is proper I ſhould not paſs over this part of my work, without acknowledging, that I have been greatly indebted to the aſſiſtance of my ingenious friend Mr. HENRY VOIGHT of this city; who has uniformly, from my firſt undertaking to build a boat, afforded me valuable hints; and has united with me in perfecting my plans. To his inventive genius alone, I am indebted for the improvement in our mode of creating ſteam; a thought which ſtruck him above two years ago, the drawing having been ſhewn to ſeveral perſons; for we *never made a ſecret* of any part of our works; but a fear of departing from old eſtabliſhed plans, made me fearful of adopting it, until I had found by his invention of *creating ſteam*, that a *condenſor* might be conſtructed on the ſame principles, (viz. a ſpiral pipe or worm) only by reverſing the agent, for the beſt way of applying *fire* to evaporate *water into ſteam*, muſt alſo be the beſt way of applying *cold water* to condenſe *ſteam*, that is, the bringing the greateſt quantity of fire into action upon the greateſt ſurface of water or the contrary--And we had an additional inducement to

ſtudy

ſtudy this ſubject, becauſe the common way of fixing boilers, required ſo great a load of brick work, that it overloaded our boat. Therefore, the firſt thought that muſt occur to every man, attempting to raiſe ſteam on board a boat, muſt be to acquire that method which would require the leaſt weight.—Since Mr. Rumſey has been in town I have been told, that he ſays I have got *his mode* of creating ſteam; whether that be the caſe or not (or whether he has *got mine)* I do not at preſent know. But as both Mr. Rumſey and Mr. Voight laid their drawings and plans before the Philoſophical Society the ſame day, it will appear how far they are alike. And Mr. Voight made a prior entry of his plans in the Prothonotary's office, in this city. If there ſhould happen to be any ſimilarity between them, it would be nothing ſurprizing; having the ſame load on both their minds, they both ſought relief; and, as ſick perſons, lacking a doctor, chance might have led them to the ſame man; and I had an undoubted right to apply every medicine that ſuited the diſorder—but I will proceed with the pamphlet.—

In Page 17, Henry Bedinger ſays, that Mr. James Rumſey informed him in or before the month of March, 1784, that he intended to give trial to a ſteam boat, and he believes he mentioned ſuch intention of Mr. Rumſey's in Kentuckey; which ſeems to have been a breach of honour, as it muſt be ſuppoſed Mr. Rumſey gave it to him in confidence; for he treated his idea of Steam as a *ſecret* to Governor Johnſon long after: thus on the diſcloſure of this friend, Mr. Rumſey builds a charge againſt me, as having filched his ſcheme in Kentuckey; this like his other charges is founded in falſehood, for it is a well known fact, that I have not been in Kentuckey ſince the year 1781. The depoſitions of George Rootes, N°. 8, and Nicholas Orrick, N°. 10, teſtifying to his having informed them, in the year 1784, of his *projecting* a ſteam boat is quite uſeleſs for reaſons already given. Meſſrs. Henry and Paine *projected* it before him; and if bare *projection* was ſufficient to build a claim on, I have no doubt but there are people now in their graves, whoſe heirs might ſet up more early claims than either of us. If Mr. Rumſey was in 1784 projecting a boat to work by ſteam, with a view of carrying it into actual execution, why did he not apply for the uſe of ſteam in his laws? the reaſon is plain,—General Waſhington gives it for him, it was "an *iminatured idea* and on which he thought he *did not rely.*" I muſt therefore contend that theſe depoſitions, loſe their weight, and the whole of his conduct proves to a demonſtration, that he could not have been engaged in making ſteam engines at the time mentioned by thoſe witneſſes, with a view of applying them to his boat. In page 20, N°. 18, he inſerts a paragraph of a letter ſaid to have been written by a Mr. Daniel Buckley, near Philadelphia, by which he fixes the time of his applying himſelf to the "perfecting his ſteam engine with much ardor." In part

of

of ſaid inſerted extract, ſpeaking of me, he ſtiles me " *a Mr. Fitch of Philadelphia;*" now this letter, if the facts it recites are true, muſt have been written *after* the 17th. of April, 1786, and not in 1785, as inſinuated by Mr. Rumſey, for I was not an inhabitant of Philadelphia till after that period; nor did I ever hear that Mr. Rumſey was employed in making a *ſteam boat* until long after that time; conſequently I could not have uſed any expreſſions about it until after April, 1786. This is a very important part of the prevarication, and carrying the air of great plauſibility, I muſt beg my Reader's cloſe attention to it, as I ſhall prove it to be falſe. Page 3, he ſays, " I wrote to General Waſhington the 10th. March, 1785, that I intended applying both powers (meaning ſteam as one) to build a boat after the model of one he ſaw at Bath, &c. and as I could gain truth only by ſucceſſive experiments, *incredible delays* were produced, &c. I bore the pelting of ignorance and ill-nature with all reſignation, until I was informed ſome dark aſſaſſins had endeavoured to wound the reputation of his Excellency, and the other gentlemen, who ſaw my exhibition at Bath, for giving me a certificate. The reflections upon theſe worthy gentlemen gave me inexpreſſible uneaſineſs, and I ſhould certainly have quitted my ſteam engines, *though in great forwardneſs*, and have produced *the boat, for which I had obtained the certificate*, for their juſtification and my own, had not a Mr. Fitch came out at *this critical minute*, with his ſteam-boat; aſſerting that he was the firſt inventor of ſteam, and that I had gotten what ſmall knowledge I had from him, &c." Now this embarraſſment being confeſſedly ſubſequent to the letter to General Waſhington, juſt mentioned, viz. 10th. March, 1785. The letter aſſerted to have been written by Mr. Buckley is incontrovertibly fixed between this date and the 1ſt. of December following, the time ſworn to for compleating of the ſteam engine; therefore, as Mr. Rumſey quitted his ſetting pole ſcheme and " purſued the perfecting his ſteam engines with encreaſed ardor (page 3) on *the reciept of this letter;* it becomes of moment to aſcertain its exact date; and I ſhall ſhew that this letter which ſet Meſſrs. Rumſey and Barns to work in ſuch haſte and with ſuch " encreaſed ardor" was not written until near a year after the time it is pretended, and the copper works ſaid to have been made in 1785 were not begun until 1786—ſo that this machinery completed ſo briſkly and ſworn to have been on board in December 1785 has made a jump of juſt twelve months, in order to perſuade the public into a belief that Mr. Rumſey's works were begun time enough to ſupplant mine.—" At *that critical minute*" ſays he, " Came out a Mr. Fitch aſſerting I had got what ſmall knowledge I had from him"—At *what* critical minute I aſk?—Mr. Rumſey's third page will tell us—In March 1785, he informed General Waſhington by letter that he *intended* applying ſteam to boats; in December following, Meſſrs. Barns

and

and Morrow ſwear the boat was ready; and his exhibiting this boat, he confeſſes was hurried on by the intelligence received from Mr. Buckley; conſequently this work and this "Encreaſed ardor" was *ſubſequent* to the date of the letter from Mr. Buckley. Then if I can fix the time of Mr. Buckley's writing the letter, I ſhall eſtabliſh a certain fixed period at which Mr. Rumſey acknowledges his works were not on board his boat. And I felicitate myſelf in being able to do it ſo inconteſtibly as to prove from his own writings that he has given *falſe dates* and aſſigned *falſe reaſons* for his movements. He knew at the time of inſerting that quibling account, that it would not bear the light, and therefore did not dare to give *the date* of Mr. Buckley's letter, wrote at that "Critical minute," for Mr. Buckley's letter would have ſhewn that this "Critical minute" was not in 1785, when they ſwear the ſteam-boat was ready, but in the Summer of 1786, full twelve months after I had made my plans public, and was procuring patterns for my preſent cylinder, and had made a complete model of a ſteam-engine in braſs and iron.—I have been at the pains of walking 66 miles to Pequa and Lancaſter to ſee Mr. Buckley, that I might obtain an additional proof (to the many others I ſhall produce) that Mr. Rumſey has tranſpoſed the order of time and antedated facts. Mr. Buckley frankly told me all he knew of the matter and fixed the time of writing his letter, *ſo circumſtantially*, to have been in 1786 and not in 1785, that not a doubt can remain—and it will further appear from the certificate he has given me that the colouring as to fact, as well as to date, has been groſsly diſingenuous, as will be ſeen on comparing his certificate, N°. 18, with the following:

N°. 11.

This may certify, that the paragraph that Mr. James Rumſey has copied from my letter, which he applies to the injury of Mr. John Fitch's character, was *not told to me by Mr. Fitch*, but by other perſons, who for reaſons were convinced of his priority of invention. And as to the time of writing the letter it was *when Mr. Samuel Briggs was making patterns* for Mr. Fitch's caſtings. As witneſs my hand this twelfth day of May, 1788.

DANIEL BUCKLEY.

On my return to Philadelphia I applied to Mr. Briggs in order to aſcertain the *Time of his making my patterns*, and he freely gave me the following certificate:

N°. 12.

This may certify whom it may concern, That in the *Summer of* 1786, I performed ſome turning work for John Fitch, being patterns for caſtings for his ſteam-boat, and before that time I made no work for the ſaid John Fitch;—That I am acquainted

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with Daniel Buckley and ſaw him at my ſhop during that ſummer and at ſundry times ſince, and we have frequently converſed about James Rumſey, but the particulars of any converſation with him I do not recollect.

SAMUEL BRIGGS.

Affirmed the 15th. May, 1788, that the foregoing is juſt and true, before

PLUNKT. FLEESON.

Thus, independant of all other proofs, have I brought a concluſive evidence out of Mr. Rumſey's own writings and from his own teſtimonies, that the ſteam machinery *ſworn* to have been on board *in December*, 1785, could not have been ready until *December*, 1786; and here I might ſafely reſt my defence, and very properly quote Mr. Rumſey's own words (annexed to this certificate, N°. 18.) viz. " Should he incline to *aſſert* hereafter, what credit he will deſerve, has been ſo clearly proved, that *future impoſitions* may be avoided, and *thoſe* who ſpread a ſlander they *do not believe*, deſerve the contempt of all honeſt men."

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But I will proceed, and muſt not omit remarking, that this ~~fourth~~ page of his work is very fatal to him. He ſays, " I ſhould certainly have quitted my ſteam-engines *(engines only in idea)* though in great forwardneſs, and have produced *the boat for which I had obtained the certificate*, *&c.* had not a Mr. Fitch come out at this critical minute with his ſteam-boat, &c." And further adds, " Had I exhibited my *firſt boat* it would have been conſtrued into an acknowledgement of Mr. Fitch's aſſertion, by producing a boat with which ſteam had nothing to do; theſe conſiderations compelled me to purſue the perfecting my ſteam-engines, with increaſed ardor."—Thus I have a proof from himſelf, that the certificates from General Waſhington, &c. (which procured his laws in Virginia, Maryland and Pennſylvania) *had no reference to ſteam*—conſequently *my laws* for the excluſive uſe of ſteam applied to boats, cannot interfere either with *his* laws, or his expectations at the time of aſking for them. I applied to the ſeveral legiſlatures openly and unguardedly, without friends and without patrons; and from the pure merit of my pretenſions, met with ſucceſs, without a whiſper being breathed, that I was interfering with Mr. Rumſey. I am confident that he never conceived me to be a rival in navigating boats, until he found his own plan hopeleſs and mine likely to ſucceed.

In his third page he ſays, " I wrote to General Waſhington 10th. March 1785, that I intended applying both powers to a boat built after the model of the one he ſaw at Bath; but the diſadvantages before mentioned ſtill remained and as I could gain truth only by ſucceſſive experiments, *incredible delays* were produced

ed—and though my diſtreſſes were greatly increaſed thereby, &c."—It is truly amazing that though he had long before this letter, been making progreſs in Steam-engines, and gaining truth by ſucceſſive experiments, and *incredible delays*, inſomuch that at the time of his propoſing to get cylinders caſt at Governor Johnſon's works in October 1785, he had the principal part of his work untouched: I ſay it is amazing, that theſe *incredible delays* ſhould all vaniſh as in an inſtant, and that between the time of his failing at Governor Johnſon's works, in October or November 1785, and the 11t. of December following, he ſhould have completed his whole machinery, ready to be put on board. —A Steam-engine is a complex piece of work, and his ſubſequent tranſactions ſhew that he found it ſo; for it has taken him from the ſummer of 1786 (when, he removed his works from Frederick-town) to the winter of 1787 to make them ready for a fair experiment. No perſon therefore can be brought to believe, that his firſt machinery could have been conjured together in little more than 30 days.—No ſuch thing happened—I have already ſufficient proof to the contrary, and have no doubt but a multitude of corroborating witneſſes will voluntarily offer themſelves, when this pamphlet gets down to Frederick-town and Shepherds town, where I ſhall take ſome pains to have it circulated.—It is truth alone I am in ſearch of, in order to wipe off the imputations from my own character; for as to ſtability of title to my excluſive rights, I ſhall not caſt away an anxious thought about it—I am ſecured by my laws—and my "*coadjutors*," as Mr. Rumſey is pleaſed to term them, I am ſure have no ſort of apprehenſion about the monies they have riſqued; and only wiſh that I ſhould remove any aſperſions that may be unjuſtly caſt upon me—Thus far it may be ſaid they have an intereſt in my ſucceſs, becauſe a law in my favour in Maryland is yet depending.

I muſt not yet quit the ſubject of Mr. Buckley's letter in his ~~fourth~~ third page, from whence it is plainly to be gathered, that ſubſequent to his letter of 10th. March 1785, to General Waſhington he meant to tell the world he was buſily employed in *private experiments* on Steam-Engines, and that although his firſt ſetting pole boat "Bore the pelting of ignorance and ill-nature," yet he did not ſet about making a Steam-engine, for this boat, until (as he calls it) the *critical moment* when a Mr. Fitch with his Steam-engine came out, aſſerting that he was the firſt inventor of Steam, and that "I had gotten what ſmall knowledge I had from him." —Now as all his experiments were privately conducted, and he does not pretend to have begun his boat engine, until Mr. Buckley had ſent notice that I charged him with ſtealing knowledge from me; I would aſk any man where I was to obtain the grounds for my charge? it could not be until I had begun my own engine, and made it every where public—then it follows that my pre-

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ended complaint againſt him muſt have been ſubſequent to my own works and prior to the beginning of his works for his boat in *November* (as he calls it) which from his own ſtatement has laid a fair and juſt foundation for my claim of public priority, for private priority is out of the queſtion, as Mr. Henry, Mr. Ellicott and Mr. Paine are before us both.

Nay, even after the real Steam-engine for his boat was actually begun, we find it kept as the moſt profound ſecret; and from Charles Morrow's depoſition it is declared, that the boat came from Shepherds-town early in the fall—that Mr. Barns went to Baltimore ſhortly after to have ſome machinery caſt; and on his return from Baltimore was ſent to Frederick-town in order to have ſome other things made (which could not conſiſtently with Governor Johnſon's letter be earlier than the beginning of November) and about the middle of November they were all finiſhed viz. *a boiler, two cylinders, pumps, pipes, &c.*—I confeſs this is very briſk work for a country town—more than ever I could get in the city of Philadelphia.

At Baltimore four large cocks were beſpoke by Mr. Barns and the braſs-founder was told they were for the *warm ſprings of Virginia* as will preſently appear; Governor Johnſon was entruſted with the ſcheme in confidence, and the copper works were carried on in Frederick-town with great ſecreſy—inſomuch that a citizen hearing it rumored that they were for a Steam-engine, applied to ſee them, but was refuſed (as will be ſhewn) and the matter ſtill remained a ſecret until, as Governor Johnſon ſays, "The deſigned purpoſe of the cylinder was a ſubject of pretty general converſation in Frederick-town"—Then during this interval of privacy, ſurely any man that ſhould have conceived the ſame idea and brought it forward to public view, ought to be entitled to the right and advantages of the diſcovery—For all theſe confidential perſons, as I have already ſaid, might have died, and the world have loſt the benefit—Let me conſider the danger of admitting this new doctrine of claims—A man makes a valuable diſcovery—he purſues it at a great expence and publiſhes it to the world—a ſett of men combining together ſhall afterwards come forth, ſwear for each other, that they had been making the ſame kind of engine, many months before, and bring proofs from reſpectable characters, that they had *hinted* at the practicability of ſuch a ſcheme, even before their private experiments. Will any man of the leaſt particle of underſtanding allow, that this *private work* ſhall be admitted to contain ſufficient evidence to overſet the public works of a fair and open artiſt? Surely not—If it was once allowed, men would not be wanting to ſwear away from the real inventor, the moſt valuable diſcoveries in the world.—All they would deſire from the public claimant, would be, for him to fix the earlieſt date to his diſcovery, and if it was 20 or even 50 years back they would prove that they themſelves, their

their fathers or grandfathers, or ſome diſtant friend, had communicated it many years before.—There is no end to this kind of proof; and both reaſon and law unite in defending the firſt *public* diſcoverer.—It would be dangerous in the higheſt degree to deviate from this rule.—If Mr. Rumſey did really in good faith and conſcience intend to carry into execution, the ſecret he communicated to General Waſhington, I can only ſay he was unlucky in delaying it ſo long, as to let me, with my ſubſequent diſcoveries, come forward before him; what I did was public—it was notorious to all Virginia and Maryland; and not a murmur was raiſed againſt me, not a ſyllable uttered (that I ever heard) charging me with interfering with Mr. Rumſey.—The Aſſemblies of Virginia and Maryland encouraged my ſcheme, and nobody told me I ſhould interfere with him.—My petitions laid long before the Aſſembly of Virginia, and a law was ultimately paſſed in my favour, without objection or complaint. Mr. Rumſey has inſinuated that I got my firſt thought from Captain Bedinger in Kentuckey, who went there in 1784—nay he goes ſo far *in one place*, as to ſay, he "Was told ſo" and in *another* that "Circumſtances leave little room to doubt it." I have already declared that I have not been in Kentuckey ſince the year 1781: thus falls to the ground, this part of his "Plagiariſm" allegations.—But I will ſuggeſt to him, that it is much more probable, that all *his* determinations of beginning his Steam-engine, might have come *to him* in a much ſtraighter line, than from Kentuckey to me. Captain Bedinger is ſo uncertain about the matter of his ever having mentioned *ſteam* in Kentuckey, that he only ſays, coldly, that he "*believes*" he alſo mentioned "that it *worked by ſteam*." I will remind Mr. Rumſey, that I not only *believe* that I preſented my plan to Congreſs, *before* the time he pretends to have ſpoken to Governor Johnſon about getting cylinders for him, and *before* his copper works were beſpoke, but the Files of Congreſs will *prove*, that in Auguſt, 1785, I laid my plan before them; and nobody will ſuppoſe it was a very indirect road from Congreſs to each of the United States. A very few days after my plan was laid before them, Mr. Rumſey might have been furniſhed with a copy of it: and if any member of Congreſs ſhould know of ſuch a tranſaction (certainly very innocent in itſelf) he will confer a great obligation on me by communicating it.—But in Philadelphia it was public before it went to Congreſs, and long before Mr. Rumſey's orders went to Frederick Town or Baltimore. I have a fair right to ſuppoſe all theſe things, and Mr. Rumſey's giving me no oppoſition in my application for excluſive laws, and even permitting his law to expire in Pennſylvania, without trying to derive any benefit from it, amount to poſitive proof that he had no ſerious thoughts about applying ſteam until it was too late.—I promiſe him I ſhall not be ſo dilatory in exhibiting *my boats* in Virginia, conformably

ably to my law. I truſt to the goodneſs of my cauſe and the honor and generoſity of my country,—and that I not only have a ſubſtantial right by excluſive laws, but by juſtice and equity.

The affidavits from William Aſkew, N°. 6, and Henry Bedinger, N°. 7, to prove that Mr. Rumſey's boat is much ſuperior to mine, is acknowledging on the part of Mr. Rumſey, that his pretenſions to the invention are but weakly founded. However faulty my works might be, and however perfect his own, it would have no force in the determination of our title to the invention; but argues a wiſh in him to gain an advantage on principles different from thoſe on which our diſpute muſt be ultimately *decided* in the *opinion* of the world.—But even this poſition of Mr. Rumſey's I will not allow: for on a compariſon of the velocity and bulk of both boats and the force applied, it is evident that mine exceeded in the proportion of more than two to one. I had a bulk of water to remove equal to above 12 tons, whilſt he had to contend with no more than 3 tons, if I am rightly informed; and our cylinders (or moving powers) were nearly, if not quite, equal: yet my boat was urged forward with nearly the ſame velocity of his boat;—therefore, his mode hath hitherto no ſuperiority. As to his drawing water in at the bottom, and puſhing it out at the ſtern of a veſſel, it is no new invention, but was long before preſented to the Philoſophical Society at Philadelphia. The thought came originally from France, of which I was acquainted before he beſpoke any of his works for ſteam, and contended the right of uſing it with Mr. Arthur Donaldſon, in the beginning of 1786, before the Aſſembly of Pennſylvania, as he attempted, at that time, to aſſume the diſcovery to himſelf.

N°. 13.

I well remember when Mr. Arthur Donaldſon propoſed before the committee of Aſſembly, a method of navigating boats by a ſtream of water forced through by means of a ſteam engine; that you appeared to be acquainted with the principle, which was ſaid to be originally Dr. Franklin's, and that you then declared it had been your intention to have made an experiment upon it.

GEO. CLYMER.

Mr. John Fitch.

May 17, 1788.

In ſpite of all oppoſition I was left in full poſſeſſion of that or any other way I choſe, provided I worked by ſteam, and no man can take it from me until my laws expire. I conceive we have by no means come to the greateſt perfection of applying our power. I am now trying an experiment, and the machine is nearly finiſhed, to propel a boat not by expelling *water*, but *air*, and hope Mr. Rumſey will allow that this is a mode peculiar to myſelf;

myſelf; but if he pleaſes he will deny it and aſſert that he had privately tried ſome experiments to aſſertain its practicability—I further hope that the public will make great allowances for my not being more forward in my plans, eſpecially when they conſider the great difficulty of procuring proper workmen, together with the new and unexplored ground that I had to travel over, but hope ſhortly that I ſhall have it ſo perfect as to give full ſatisfaction of its utility.

In Page 5, he aſſerts, that my boat will not be propelled at the rate of more than three miles per hour when no tide oppoſes: this aſſertion, I believe, will ſhortly be proved both raſh and envious: I can make her go not only three, but three times three.

But as I have before mentioned, this is taking up the diſpute upon different principles, than thoſe Mr. Rumſey found neceſſary to hold up to public view, viz. That he was the inventor of the ſteam-boat.—This leads me to conſider the principles on which excluſive privileges are founded, agreeably to juſtice and policy. If we have recourſe to the enlightened nations of Europe, and more eſpecially to England, whoſe laws reſpecting the title to property are (with little and in ſome caſes with no variation) in force among us, we ſhall find that their laws imply that no ſpecies of property ought to be held more ſacred than the property of inventions: for having their origin in the imagination of man, uncertain in their operations, and expenſively perplexing in experiment, it becomes neceſſary to have ſome mode eſtabliſhed to ſecure to the owner the full benefit of his invention, which might otherwiſe prove his ruin. To prevent which, juſtice and good policy have pointed out a remedy, and cuſtom has eſtabliſhed it on a permanent baſis.—The inventor can claim no benefit from his thoughts or inventions, before he makes a public declaration of ſuch invention in ſome place of record eſtabliſhed for ſuch purpoſes,—that is—he who invented and publiſhed a *Steam-Engine* will have an excluſive right for a certain number of years for all ſteam-engines: at the *expiration* of which, each *improver* has an undoubted right to the benefit of any *improvement*. On theſe principles he who firſt invented and publiſhed the idea of a ſteam-boat, inveſts himſelf with a fair and juſt title to all ſteam-boats for a certain time, which in juſtice and policy government is bound to ſupport.—The ſtate of Pennſylvania hath given her ſentiments on this head, and hath declared ſuch to have been her explanation of the title to inventions by rejecting Mr. Arthur Donaldſon's petition to have me confined to a certain mode of applying my power.—It was not the mode of *uſing the force of ſteam* which had any merit in this invention; but, it was the idea of connecting *ſteam* with *navigation*, that juſtly claimed the public patronage as ſoon as that idea was made public, and the benefit of it applied for.

I ſhall

I ſhall now introduce the proofs I have promiſed, and ſhow to the world what degree of credit and countenance ought to be given to a man, who in order to deprive me of my juſt rights, has brought forward evidences to ſwear to facts which are totally falſe—You will ſee that tranſactions are antedated and a deception intended, with a view both of diſgracing and robbing me—Confident that groſs miſrepreſentations had been made uſe of, I was at the expence and trouble of two journeys to Frederick-town in Maryland, the ſcene of his operations, and there I was ſoon confirmed in my ſuſpicions that this plauſible pamphlet was built on falſehood, and that the patrons whom Mr. Rumſey's addreſs has procured him in this city, have committed themſelves too unreſervedly to a ſtranger. I now find the reaſon of his ſo long delaying to put in his claim—it was that a period might elapſe ſufficient for memory to be uncertain, and for facts to be tranſpoſed in the order of time; the death of one of his principal workmen alſo rendered it probable that ſome of his pretended proofs might be difficult to detect. A love of juſtice has induced a number of perſons to ſtep forward and teſtify in the moſt unequivocal manner that the works ſworn by Mr. Rumſey's evidences to have been finiſhed the 1ſt. December, 1785, were not begun until March following, when he muſt have been very fully poſſeſſed of a knowledge of my pretenſions.

The ten following certificates will prove fully the antedating. The affidavit of Frederick Tombough, Smith and partner of Mr. Zimmer, the Copper-ſmith in Frederick Town who made the copper work for Mr. Rumſey's ſteam-boat.

N°. 14.

Maryland, Frederick County, April 18th. 1788. Then appeared before the ſubſcriber, a juſtice for ſaid ſtate and county, Frederick Tombough, aged about thirty-nine years, who being ſworn on the holy Evangeliſts of Almighty God, depoſeth and ſayeth, that ſome time in March 1786, he, this deponent was in partnerſhip with Matthias Zimmers, now deceaſed, in a black-ſmith's ſhop, adjoining ſaid Zimmers' copper-ſmith's ſhop—and that he remembers two copper pipes being brought into his ſhop by ſaid Zimmers to fix the ſeams—which pipes he was told were for Mr. Rumſey's Steam boat—and further that he knew of no work being done in Mr. Zimmers' ſhop on account of ſaid boat previous to the time above mentioned.

Sworn before

GEORGE SCOTT.

The certificate of Mrs. Zimmers, widow of Mr. Zimmers, which is corroborated, and the time eſtabliſhed, by the next certificate:

N°. 15.

N°. 15.

This may certify, that I the ſubſcriber, wife to the late Matthias Zimmers, deceaſed, have no accounts in my books ſo as to aſſertain the time of Mr. Rumſey's beſpeaking his machinery for his Steam-boat, or as to the time of his taking it away—but that Michael Baltzel turned works to finiſh the firſt machinery ſaid Rumſey had of my huſband according to the beſt of my knowledge.—As witneſs my hand, this 29th. April, 1788.

ELIZABETH ZIMMERS.

The certificate of Michael Baltzel, Turner, which eſtabliſhes the time of Mrs. Zimmers' fact.

N°. 16.

Frederick-town, 17*th. April*, 1788.

This may certify that I the ſubſcriber turned works for Mr. James Rumſey of Virginia, for his Steam-boat viz. a round piece of wood about 8 inches diameter and about 4 feet long, &c. to round his copper works upon—ſaid turning was done in March 1786. As witneſs my hand

MICHAEL BALTZEL.

The certificate of Mr. Jonathan Morris, inn-keeper, which confirms the aſſertion in Governor Johnſon's letter, that the "Deſigned purpoſe of the cylinders was a ſubject of pretty general converſation" in Frederick Town, and therefore had it been prior to my petition to the aſſembly of Maryland the middle of December, 1785, Mr. Foy, the member of aſſembly reſident in that town muſt have known it, and the houſe have received information from him, when probably they might have aſſigned other reaſons for rejecting my petition than mere bareneſs of finances. If all the machinery was ready to put on board, as Mr. Morrow ſwears, on the 1ſt. December, it muſt have been a fact notorious to the whole town;—but the following declaration ſhows that ſo far from being on board in December, 1785, it was ſhut up as a ſecret even ſo late as the latter end of March following; ſo that this "pretty general converſation," which Governor Johnſon ſpeaks of, could not have happened until about this time, and all the evidences I produce confirm my aſſertion, that Mr. Rumſey did not begin his ſteam-engine, until I had publiſhed my plan all through Maryland and Virginia.—The certificate is as follows:

N°. 17.

Frederick-town 18*th. April* 1788.

This may certify that I the ſubſcriber was towards the latter end of March 1786, informed that Mr. Matthias Zimmers had

begun ſome machinery for Mr. Rumſey's Steam boat—Accordingly I called on Mr. Zimmers to ſee it, but was refuſed the ſight of it, as it was then retained as Mr. Rumſey's ſecret—but was informed that it was begun in the beginning of the ſame month, this I declare to be the truth as near as I can recollect—As witneſs my hand

JONATHAN MORRIS.

The depoſition of John Peters, who performed ſuch parts of Mr. Rumſey's machinery as were made of tin.

No. 18.

Frederick County, Maryland, April 18th. 1788.

I the ſubſcriber was a journeyman and worked for Mr. Matthias Zimmers—and began to work, in the tin buſineſs, at the ſame time Mr. Zimmers did begin the copper works for Mr. James Rumſey, of Virginia, for his Steam boat, which ſaid coppers and tin works were begun in March, in the year 1786.

JOHN PETERS.

Sworn before me, JACOB YOUNG, one of the juſtices for Frederick county, Maryland.

The depoſition of John Frymiller, who was apprentice to Mr. Zimmers at the time he made the copper works for the ſteam-engine, ſhewing not only that the works were begun and finiſhed in a ſhop next to Mr. Tombough; but that no part of ſaid machinery was begun *before* the ſpring, 1786.

No. 19.

State of Maryland, Baltimore County.

On this twenty-ſixth day of April, in the year of our Lord one thouſand ſeven hundred and eighty eight, before me the ſubſcriber one of the juſtices of the peace for the county aforeſaid, perſonally appeared John Frymiller of Baltimore town in ſaid county, and made oath on the holy Evangeliſts of Almighty God, that during the time he was an apprentice to the late Mr. Matthias Zimmers of Frederick-town, in Frederick county and ſtate aforeſaid, deceaſed, when he the ſaid Matthias Zimmer made Mr. James Rumſey's machinery for the Steam-boat—That he, this deponent, did work at the ſaid James Rumſey's machinery—That it was begun in the ſpring of the year 1786, and that no part of ſaid machinery was begun before the time above-mentioned by the ſaid Zimmers, to the beſt of his knowledge—and further, that the ſaid machinery was begun and finiſhed in a ſhop adjoining Frederick Tombough's ſmith-ſhop, (which ſaid Tombough was, as the deponent has been informed, in partnerſhip in the ſmith's

buſineſs

buſineſs at ſaid time with ſaid Zimmers) in which ſaid Matthias Zimmers had his copper-ſmith's fires for brazing &c. and further this deponent ſaith not.

Sworn before me

JOHN MOALE.

The following certificate proves that Mr. Rumſey's machinery was made by Mr. Zimmers, in Frederick Town, in the ſpring of 1786, their being but two Copper-ſmiths in Frederick Town, viz. Meſſrs. Matthias Zimmers and Joſhua Minſhall, the certifier.

N°. 20.

This may certify, that I the ſubſcriber, copper-ſmith, have reſided in this town about three years, during which time there has no copper-ſmiths reſided in the town except Mr. Matthias Zimmers and myſelf and that I was knowing to Mr. Zimmers making copper works for Mr. Rumſey's Steam boat, and am of opinion it was late in the ſpring or ſummer before ſaid Rumſey took ſaid works from Mr. Zimmers in the year 1786. As witneſs my hand, 29th. April 1788, at Frederick-town, Maryland.

JOSHUA MINSHALL.

The foregoing teſtimonies, I preſume, will carry full conviction that Mr. Rumſey has ſhifted his dates, and has got two of his workmen to ſwear to it—for Meſſrs. Barns and Morrow, if they had conſulted their accounts, muſt have found that they had made a lapſe of a whole year at leaſt, and that the December, 1785, which they ſpeak of muſt have been December, 1786. —The circumſtance of being ſtopped by the ice proves it to have been in the winter, and therefore muſt inevitably have been in the winter of 1786. But this was too late a date to ſerve their purpoſe of ſupplanting my claims and juſt rights, which I mean to maintain under the laws I have already obtained and have no doubt of ſucceeding in my applications to the other aſſemblies when they come to ſee my proofs and Mr. Rumſey's falſe datings. He has mentioned the obtaining part of his works from Baltimore, where I can alſo ſhew he has uſed the ſame want of candor, and it will confirm the proofs from Frederick Town.

It appears the four large cocks for his ſteam-pipes and works, were beſpoke of Chriſtopher Raborg, in Baltimore, by Mr. Barns, who, the better to conceal the "deſigned purpoſe of the cylinders," told him they were for the warm ſprings in Virginia, —perhaps a little mental reſervation might cover this deviation from fact.—But Mr. Raborg had no account thereof and could not give the time with preciſion—though he believes they were made in the fall of 1785;—the cerificates, N°. 20 and 21, which follow, prove that the time was certainly in the ſpring 1786. As theſe certificates appear to refer only to cocks made for the warm ſprings,

ſprings, I had conſiderable doubts about admitting them into my defence; becauſe Mr. Rumſey, on finding that I proved them to be made in March, 1786, might (if he pleaſed) adhere to Mr. Barns's declaration of their being made for the warm ſprings and not for the ſteam-boat: But I am now happy in having a confirmation under Mr. Rumſey's own hand, publiſhed in Mr. Oſwald's paper of the tenth inſtant, where he informs the public, " Mr. Raborg was the perſon who undertook to make cocks for my ſteam boat, and by him I ſhall prove that they were finiſhed at the time he mentioned to Mr. Fitch, viz. the fall of 1785."

Chriſtopher Raborg's certificate is as follows:

No. 21.

This may certify, that Mr. Joſeph Barns did beſpeak of me four braſs cocks, which he ſaid were for the warm ſprings;—that being diſappointed by my journeymen, I got them made by Mr. Charles Weir & Co.—ſaid cocks I do believe were made in the fall 1785, but have no charge made of them to aſſertain the time with preciſion--this I aſſert, as witneſs my hand, at Baltimore, this 26th. day of April 1788.

CHRIST. RABORG.

The certificate of Charles Wier, who ſpeaks with tolerable certainty of the works being made in the ſpring of 1786.

No. 22.

This may certify, that when I was in partnerſhip with Iſaac Cauſten, I made four braſs cocks for Mr. Chriſtopher Raborg, for which I received the money and charged myſelf with it—that my books are deſtroyed and I cannot exactly recollect the time of their being made, but am perſuaded it was early in the ſpring in the year 1786—this further may certify, that I never made the exact number of four cocks for ſaid Raborg, except only that one time. As witneſs my hand, at Baltimore, 26th. day of April 1788.

CHARLES WEIR.

The certificate of Iſaac Cauſten, who aſcertains upon good grounds that the ſaid work was done and charged on the 29th. March, 1786.

No. 23.

This may certify, that I the ſubſcriber with my partner Charles Weir, made four braſs cocks for Mr. Chriſtopher Raborg, and charged them on the partnerſhip account—ſaid book has ſince been deſtroyed, but from ſome looſe papers I found charged to Mr. Raborg on the Company's account, on the 29th. March 1786, four braſs cocks, which with other accounts I have drawn

out

out into my day book. Neither have I made the exact number of four cocks for him at any other time. In witneſs whereof I have hereunto ſet my hand this 26th. day of April 1788.

ISAAC CAUSTEN.

The reader will doubtleſs, on an examination of the two pamphlets, perceive things in their true light, and that Mr. Rumſey made no pretence to uſe ſteam till after the failure of his boat on the principles exhibited at Bath, after I had not only inveſted myſelf with an undoubted title, by exhibiting the invention to Congreſs in Auguſt, 1785, and had publiſhed it to the ſtates of Virginia and Maryland, who became virtually bound to ſecure me the right. Mr. Rumſey proſecuting his works in ſecret, and appearing at this late day, with antedated facts, is a full proof that he had no claim to the invention, nor is there any one principle of law or equity, on which he can found his pretenſions. If he claims it on his *thought* Mr. Paine, Mr. Henry and Mr. Andrew Ellicott are long before him;—if on forming drafts without communicating them to the public, he muſt acknowledge Mr. Henry's priority: but if it is to be decided, as it certainly muſt, by the eſtabliſhed mode of public declaration on record, my title is indiſputable. Being, therefore, certain of the ſtability of my claim, founded on the modes eſtabliſhed in juſtice and policy, I have not a doubt but my country will ſecure and protect the right ſhe has ſo deliberately granted to me. Under this ſecurity I embarked my time, my fortune and reputation, and thus embarked, I am certain I have nothing to fear; but ſhall depend with full confidence on a continuance of that juſtice which is due to the rights of the citizen, and the honor of my country.

JOHN FITCH.

Philadelphia, 10th. May, 1788.

POSPSCRIPT.

POSTSCRIPT.

SINCE this Pamphlet went to preſs a ſecond edition of Mr. Rumſey's pamphlet has been printed in this city, in which a ſhort advertiſement is prefixed and an extract of his own letter to General Waſhington which are as follow:

ADVERTISEMENT.

THE following pages are taken from a pamphlet publiſhed in Virginia, to prove the author's prior right of applying ſteam, to propel boats, &c. as well as to eſtabliſh the principles on which he has done it, a few copies were then thought ſufficient for that purpoſe, but as Mr. Fitch intends to anſwer the pamphlet, it is therefore neceſſary to re-publiſh as much of it as reſpects Mr. Fitch, which is done with no other variation, from the original, than to correct a few of the omiſſions and miſtakes that were introduced into the firſt publication, from the hurry in which it was done, (as the author at that time could not attend the preſs) and was circulated with an apology annexed to the poſtcript, for the imperfection of the impreſſion; of theſe corrections, perhaps Mr. Fitch may take ſome notice, if he ſhould, ſuch part of the old pamphlet ſhall be reprinted (verbatim) to convince the Public that the ſubject has not been varied; but a little better explained. The ſophiſtry in Mr. Fitch's reply (ſhould it contain what he informs me it does) is evidently calculated to make impreſſions, unfavourable of me, on the Public mind, and to wound the reputation of ſeveral reſpectable characters, I muſt therefore beg the Public's indulgence, to ſuſpend their opinion for a few weeks, when I ſhall have it in my power to lay before them ſuch additional ſtatement of facts, ſupported by ſuch reſpectable teſtimony, as will inconteſtible prove the unjuſtifiable ſteps Mr. Fitch has taken, to deprive the author of his diſcoveries, and to injure the reputation of ſundry gentlemen.

N°. 19. is added to this publication, it is part of a letter wrote by the editor to his excellency General Waſhington, dated the tenth of March 1785, which will ſhew that the editor had fixed on a method of applying ſteam to propel a boat before Mr. Fitch knew (from his own account of the matter) that ſteam had ever been made uſe of for any purpoſe whatever; how then is it poſſible he ſhould have the prior right to this diſcovery? if it is aſked, who made the moſt promiſing experiment? it would be found that my experiments two years ſince exceed the beſt he has ever made;

made; muſt I then be deprived of my diſcoveries, which are ſubſtantial, becauſe I endeavoured to keep them ſecret until perfected? juſtice will never ſuffer it, I therefore with the greateſt confidence look up to my countrymen for their ſupport, according to the merits of my cauſe, and have the honor of ſubſcribing myſelf their

moſt devoted humble ſervant
JAMES RUMSEY.

Philadelphia, May 7, 1788.

As to his advertiſement I have fully proved that he made no experiment on his boat with Steam two years ago, his machinery being at that time in Frederick-town—And his boat ſo far exceeding mine will alſo appear a wrong aſſertion as the greateſt diſtance he pretends to have propelled his ſmall boat per hour is four miles, and that appears to be mere ideal eſtimation; [redacted] my boat, by the ſame force applied, I let out three miles and a quarter per hour by the log-line. [redacted] this is departing from the merits of the diſpute, but to convince the public of his aſſertion on this head being abſurd, I ſhall introduce certificates N°. 24, 25, 26. As to his requeſt of ſuſpending the public opinion, I reſt my cauſe on ſolid and fair concluſions drawn from his pamphlet, a very ſafe and candid judgment may be formed of the merits of Mr. Rumſey's pretentions, it being evident that all his falſe aſſertions and falſe dating will never prove that two and two are not four.

N°. 24.

Theſe may certify, that the ſubſcriber has frequently ſeen Mr. Fitch's Steam boat, which with great labour and perſeverance he has at length compleated and has likewiſe been on board when the boat was worked againſt both wind and tide, with a very conſiderable degree of velocity by the force of Steam only. Mr. Fitch's merit in conſtructing a good Steam-engine and applying it to ſo uſeful a purpoſe will no doubt meet with the encouragement he ſo juſtly deſerves from the generoſity of his countrymen, eſpecially thoſe who wiſh to promote every improvement of the uſeful arts in America.

DAVID RITTENHOUSE.

Philadelphia, December 12th. 1787.

N°. 25.

Having alſo ſeen the boat urged by the force of Steam and having been on board of it when in motion, I concur in the above opinion of Mr. Fitch's merits.

JOHN EWING.

From

N°. 26.

From the well known force of Steam. I was one of the firſt of thoſe who encouraged Mr. Fitch to reduce his theory of a Steam-boat to practiſe, in which he has ſucceeded far beyond my expectations. I am now fully of opinion that Steam-boats may be made to anſwer valuable purpoſes in facilitating the internal navigation of the United States, and that Mr. Fitch has great merit in applying a Steam engine to ſo valuable a purpoſe and entitled to every encouragement from his country and countrymen.

ANDREW ELLICOTT.

Philadelphia, December 13th. 1787.

Copy of Mr. Rumſey's Extract, N°. 19.

The following is part of a letter, wrote by the editor, to his Excellency General Waſhington, dated the 10th. of March, 1785.

After mentioning that kind of machine for propelling boats which the General had ſeen a model of, I proceed to ſay—" I have taken the greateſt pains to perfect another kind of boat, *upon the principles I mentioned to you at Richmond* in November laſt, and have the pleaſure to inform you that I have brought it to great perfection; it is true, it will coſt ſomething more than the other way, but, when in uſe, will be more manageable, and can be worked with as few hands; the power is immenſe—and I have quite convinced myſelf that boats of paſſage may be made to go againſt the current of the *Miſſiſſippi* or *Ohio* rivers, or in the *Gulf Stream* from the *Leeward* to the *Windward-Iſlands*) from ſixty to one hundred miles per day. I know this will appear ſtrange and improbable to many perſons, yet I am very certain it may be performed, beſides, it is ſimple (when underſtood) and is alſo ſtrictly Philoſophical.

The principles of this boat I am very cautious not to explain, as it would be eaſily executed by an ingenious perſon.

The plan I mean to purſue, is to put both the machines on board of boats * built on a large ſcale, and then, Sir, if you would be kind enough to ſee them make actual performances, I ſhould not doubt but the aſſemblies would allow me ſomething handſome, which would be more advantageous to the public than to give me the excluſive right of uſing them.

As

* There were two boats connected, in the model I exhibited at Bath in September 1787, which is the reaſon I ſpeak of boats in the plural, as experiment had convinced me that a ſingle boat would not ſucceed on that principle.

As to the extract of his letter to General Washington of the tenth of March, 1785, it is nothing more than a declaration that he intended something;—that even if it was steam he meant to make use of, it was a profound secret which he was then cautious not to explain. But let us take a view of this letter and I have no doubt, but from the very wording of it, that it will very clearly appear, that the utility of steam (if that was what he meant to convey) was with him at that time very doubtful and upon which he could have no kind of dependance; and holding up the idea of secrecy so punctually, least some artist, more ingenious than himself, should compleat a steam-boat before him, shews indubitably that he conceived it as an agent at a great distance from him and upon which he had no reliance or from which the public could then expect no advantage, and indeed I am confident that his ideas of a steam engine, (if any he had, which I much doubt) were very inferior to Messrs. Henry's, Ellicott's, Pain's, &c. in the year 1778. but as no publication to the world took place by them, they are candid enough not to claim it as an invention of theirs. But should I even go so far as to admit he had thoughts of applying steam, and that he intended exhibiting a steam-boat to General Washington, it was nothing more than an intention he held in secret, on the 10th. of March, 1785, and even by his declarations to Governor Johnson, if they were as early as October or November, 1785, he kept it then a secret —nothing was imparted to the Public, therefore nothing due from them. I had long before declared my intentions through Congress, and thereby invested myself with the indisputable title to my invention throughout the United States. Maryland and Virginia had virtually pledged the honor of their states to secure me in this right.—Virginia has since supported that honor, by cheerfully passing a law for that purpose, and Maryland, I doubt not, as also other of the United States, will pay equal regard to justice and policy.

N. B. As the application of steam to vessels will undoubtedly claim the early attention of the world, as the least expensive and safest mode of navigation,—I doubt not but the impartial public will yet, with pleasure, secure in me those rights, for which security, had I applied on the first exhibition of my scheme, would have been granted without murmur or delay; but as a confidence in the honor of my country, and a want of finance, were then the preventatives, the delay certainly will not opperate now against me; as the utility of the invention more clearly appears, and thereby the attention of my country more reasonably claimed.

The following certificates were omitted in their proper places.

No. 1.

I do certify, that as I was returning with John Fitch from Neſhamany meeting ſome time in April, 1785, as near as I can recollect the time, when a gentleman and his wife paſſed by us in a riding chair; he immediately grew inattentive to what I ſaid. Some time after he informed me that at that inſtant the firſt idea of a ſteam-boat ſtruck his mind.

JAMES OGILBEE.

No. 2.

An Extract of a Letter from James Scout.

You are deſirous of knowing from me when the firſt thought of a Steam-boat came in your head; this I cannot tell, but this you told me, that in the month of April, 1785, you was travelling down Street road in company with Mr. James Ogilbee and Mr. Sinton paſſing you on Street road, that then the firſt thought occurred to you of a Steam-boat, and the month of May or June following you ſhewed me a plan of your machine on paper, this truth I ſhall ſeek no further teſtimony to ſupport; 'tis too generally known; let them that doubt it come and hear more from

Your humble Servant,

JAMES SCOUT.

April 15th. 1788.

No. 5.

This is to certify, that Mr. John Fitch called upon William Henry, Eſquire, my late huſband in his life time, about two years and an half ſince, when Mr. Fitch ſhewed to him drafts and a model of a machine how to propel a boat through the water: And further, that I have frequently heard Mr. Henry applying ſteam, as a mean to urge boats through the water by force of it, and that he had propoſed laying a model of a machine, for that purpoſe, before the Philoſophical Society long before Mr. Fitch called upon him.

Witneſs my hand, this 12th Day of May, 1788.

Teſt.
JNO. JOS. HENRY.

ANN HENRY.

F I N I S.

A

PLAN

WHEREIN THE POWER OF

STEAM

IS FULLY SHEWN,

By a new conſtructed Machine, *for propelling* Boats *or* Veſſels, *of any burthen, againſt the moſt rapid* ſtreams *or* rivers, *with great velocity. Alſo, a* MACHINE, *conſtructed on ſimilar philoſophical principles, by which* water *may be raiſed for* Griſt *or* Saw-Mills, *watering of* Meadows, *&c. &c.*

BY JAMES RUMSEY,
OF BERKELEY COUNTY, VIRGINIA.

TO THE PUBLIC.

THOSE who have had the good fortune to diſcover a new machine, or to make any material improvements on ſuch as have been already diſcovered, muſt lay their account to encounter innumerable difficulties; they muſt arm themſelves with patience to abide diſappointments; to correct a thouſand imperfections (which the trying hand of experience alone can point out) to endure the ſmarting ſhafts of wit, and, what is perhaps more intolerable than all the reſt put together (on the leaſt failure of any experiments) to bear up againſt the heavy abuſe and bitter ſcoffs of ill-natured ignorance. Theſe never fail to repreſent the undertaker as an impoſter, and his motives the moſt knaviſh: Happy for him if he eſcape with ſo gentle an appellative as that of a madman.

This is the fate of the unlucky projector, even in the cities of Europe, where every material is at his command, and every artificer at his ſervice. A candid public will then conſider my

 ſituation;

ſituation; thrown by hard fate beyond the mountains, and deprived of every advantage which that grand mover, *money*, produces, they will eaſily conceive how my difficulties have been multiplied, which is the only reaſon of my not exhibiting my long promiſed BOAT before this; and which I hope, will be a ſufficient apology. Even now, theſe difficulties render my machinery very incomplete; but Mr. Fitch's endeavouring to procure patents for his boat, (of which I ſhall ſpeak hereafter) and having actually procured an excluſive right from two reſpectable Aſſemblies, (who had granted me the ſame in the year 1784.) Before I was aware what he was about, I was neceſſitated to exhibit, circumſtanced as I was; and my machine, with all its misfortunes upon its head, is abundantly ſufficient to prove my poſition; which was, "That a boat might be ſo conſtructed, as to be propelled through the water at the rate of ten miles in an hour, by the force of *ſteam*; and that the machinery employed for that purpoſe, might be ſo ſimple and cheap, as to reduce the price of freightage, at leaſt, one half in common navigation; likewiſe, that it might be forced, by the ſame machinery, with conſiderable velocity, againſt the conſtant ſtreams of long and rapid rivers.

Such a machine I propoſed to prepare, and ſuch a boat to exhibit; this I have now ſo far performed, in the preſence of ſo many witneſſes, and to the ſatisfaction of ſo many diſintereſted gentlemen, as to convince the unprejudiced, and deprive even the ſceptic of his doubt.

If the reader will be pleaſed to turn to the annexed certificates, N°. 1, 2, 3, he will be convinced that on Monday, the 3d. day of December laſt, my boat was propelled with near half her burthen on board, againſt the current of Potowmack river, at the rate of three miles in an hour, notwithſtanding the bad order the machinery was then in; and by the certificates, N°. 4, and 5, on the eleventh of the ſame month, by what little repairs I could give it, in a country where conveniences were not to be had, her progreſs againſt the ſame ſtream was encreaſed to four miles in an hour, with more than half her burthen on board. What additions may not be expected, if I am enabled, by the generoſity of the different Aſſemblies to perfect my plan?

In the month of September, 1784, I exhibited the model of a boat before his Excellency General Waſhington, at Bath, in Berkeley county, calculated for ſtemming the currents of rapid rivers only, conſtructed on principles very different from my preſent one. Satisfied with the experiment of her making way againſt a rapid ſtream, by the force of the ſaid ſteam, the General was pleaſed to give me a moſt ample certificate of her efficacy; and though the great utility of ſuch a boat will appear, if ever a fair trial ſhould be made of it: and though at the time of my exhibition it was fully my intention to complete this boat,

yet,

yet, in the courſe of that fall and winter, I made ſuch progreſs in ſome ſteam engines, which I had long before conceived would become of the greateſt conſequence, that I poſtponed it, till experiments ſhould determine whether the ſteam engines could be reduced to ſuch ſimplicity and cheapneſs, as to make them of public benefit; not being certain of this, though perfectly convinced of the power, was my only reaſon for not mentioning this ſcheme alſo to the General, at that exhibition; and I flattered myſelf this invention, if it anſwered my expectations, (the truth whereof experiments have now eſtabliſhed) would render my labours more extenſively uſeful, by being equally applicable to ſmall boats or veſſels of the largeſt ſize, to ſhallow and rapid rivers or the deepeſt and roughſt ſeas, (indeed, in large veſſels, compared with the value of the freightage, the expence of the machinery proportionally decreaſes) I applied myſelf with unremitted attention to perfect my ſteam veſſels, and made ſuch progreſs in that fall and the enſuing ſpring, that my experiments aſſured me the perfection of ſuch a machine was within my reach. I therefore wrote to General Waſhington, the 10th of March 1785, that I intended applying both powers to a boat built after the model of the one he ſaw at Bath; but as the diſadvantages before mentioned ſtill remained, and as I could gain truth only by ſucceſſive experiments, incredible delays were produced; and though my diſtreſſes were greatly encreaſed thereby, I bore the pelting of ignorance and ill-nature with all reſignation, until I was informed ſome dark aſſaſſins had indeavoured to wound the reputation of his Excellency, and the other gentlemen who ſaw my exhibition at Bath, for giving me a certificate. The reflections upon thoſe worthy gentlemen gave me inexpreſſible uneaſineſs, and I ſhould certainly have quitted my ſteam-engines, though in great forwardneſs, and have produced the boat for which I had obtained the certificate, for their juſtification and my own, had not a Mr. Fitch came out at this critical minute with his ſteam-boat, aſſerting, that "he was the firſt inventor of ſteam, and that I had gotten *what ſmall knowledge I had* from him, but that I had not the eſſentials (vide N°. 18). There was no time to looſe, for had I delayed a moment, all my time, which was ſeveral years with the cloſeſt attention, all my expences, which had been very great, to the moſt of all I had, would have been irrecoverably loſt; beſides, had I exhibited my firſt boat, it would have been conſtrued into an acknowledgment of Mr. Fitch's aſſertion, by producing a boat with which ſteam had nothing to do. Theſe conſiderations compelled me to purſue the perfecting my ſteam-engines with increaſed ardor, and happy am I to inform the public, they are now ſo far completed, as to manifeſt their valuable purpoſes for the navigations before-mentioned, applicable to veſſels of all dimenſions, equal to forcing boats by the aſſiſtance of poles, worked

by

by the ſame machine, againſt any rapid the ſame boats can with ſafety come down; and, for raiſing water, for griſt or ſaw-mills watering meadows, or purpoſes of agriculture, cheaper than races can be dug of any conſiderable diſtance, or dams made, whilſt Mr. Fitch is praying the different Aſſemblies for four years longer to perfect his *thing*, not to mention the enormous difference there is in weight, machinery and expences, between his ſteam-engine and mine, (to be ſatisfied in this particular, the reader will be pleaſed to turn to the annexed papers, N°. 6 and 7.)

Leaſt it ſhould be ſuggeſted that I borrowed my principles of Mr. Fitch (though I believe the fact to be exactly the reverſe) I have been at the pains to prove inconteſtibly, that my idea of a boat to be worked by ſteam, was a conſiderable time before his, and that my idea had been mentioned at Kentuckey, (from whence, I am told, he brought his) by a gentleman to whom I communicated it, previous to his departure for that country. For the former, the reader will be pleaſed to refer to the annexed affidavits, N°. 8, 9, 10, 11, 12, and to a paragraph from his Excellency General Waſhington's letter, in anſwer to mine, of the tenth of March, 1785, N°. 13, and to Govenor Johnſon's letter, N°. 14, for the latter (that is, of my intentions being mentioned at Kentuckey,) to Mr. Michael Bedinger's affidavit, No. 15.

I have been unavoidably led to mention Mr. Fitch for my own juſtification, and to prove my prior right to the ſteam invention, and I ſhould have ſaid no more, but let experience determine whoſe principles are ſoundeſt, had not Mr. Fitch, equally void of decency and truth, aſſerted "I got what ſmall knowledge I have of ſteam boats from him." N°. 18. By the reſpectable teſtimony of his Excellency General Waſhington, N°. 13; by Governor Johnſon, No. 14, and by certificates and affidavits of many other gentlemen, hereunto annexed, I prove my idea was nearly maturated, before ſteam had ever entered his imagination, by his own confeſſion to Governor Johnſon; nor was my priority unknown to Mr. Fitch, for General Waſhington informed him, "though he thought himſelf not at liberty to diſcloſe my principles, yet he would aſſure him his thought was not original, and that I had mentioned the application of ſteam to him before," (No. 14) and therefore he declined giving Mr. Fitch an introductory letter to the Aſſembly of Virginia. What dependence can the public put in the promiſes of a man, who has knowingly and unprovokedly (for I never ſaw Mr. Fitch) treated an individual ſo unworthily. Now I can, with truth aſſure the public, that Mr. Fitch's boat, ſo loaded with machinery, complexity and expence, (granting his machine all the properties he aſcribed to it in his publication) can never be uſeful; becauſe, his powers, by his own ſhewing, allowing for frictions and the neceſſary ſlipping of his paddles through the water,

will

will not propel his boat, at the rate of more than *three* miles in an hour, where no current oppoſes.

If Mr. Fitch did get his firſt idea of a ſteam boat, from what Captain Bedinger ſaid reſpecting mine, at Kentuckey, (which circumſtances leave little room to doubt) and thought himſelf juſtified in making an application to his own advantage, as it was not delivered to him in confidence, ſurely nothing can be ſaid in his defence, for endeavouring to rob the firſt inventor of his right, and, by changing perſons with him, to transfer the odium of plagiariſm from himſelf to the real proprietor.

But it is aſtoniſhing what latitude ſome men will give themſelves, for the wickedneſs of a certain —— ——, is, I think, without parallel. In or about the month of June, 1787, this Mr. —— informed me he had invented a machine to raiſe water, by the action of that water alone; that he was preparing a number of wheels, and other things for perfecting his machine, and begged to know my opinion of it; at the ſame time making the utmoſt profeſſions of ſecrecy and friendſhip. To ſave him the expence of preparing materials for a machine, which muſt, from the nature of things, prove abortive, without enquiring into his plan, I convinced him, by explaining great part of mine, of the impoſſibility of his ſucceſs. Having, by his profeſſions, and all outward ſhews of religion gained ſo much of my confidence and ſecret, he ſoon after removed himſelf to Baltimore, where he cauſed a machine to be made on the out-work of my principles (though very imperfect, for he was not entruſted with ſome of the moſt material parts) which he exhibited to view, and had the audacity to petition the Maryland Aſſembly to give him an excluſive right for the emoluments of another's invention, ſo ſurreptitiouſly obtained; but he received the denial he ſo juſtly merited. The reader will be pleaſed to peruſe N°. 16 and 17, hereunto annexed, for the whole of this pitiful tranſaction.

The following EXPLANATION will give a general idea of the principles by which *ſteam* acts on my boat. Accurate calculations of the particular powers, ſeem not neceſſary here to be given.

In the bottom of the boat, where a kelſon ſhould be, there is a trunk 36 feet long; the after end is open, and terminates at the ſtern poſt; the other end is cloſed, and the whole trunk, according to its dimenſions, occupies about three-fourth parts of the length of the boat. On the cloſed end of this trunk ſtands a cylinder, two and a half feet long, from this cylinder there is a communication into the trunk, which lets water paſs freely from the cylinder to the trunk, through which it is diſcharged by the ſtern. There is another communication from the bottom of the cylinder, by a tube or pipe, to the river or water under the

the boat; on the top of this tube, and within the cylinder, there is a valve to admit the water from the river into the cylinder; it likewiſe prevents it from returning again the ſame way. On the top of this cylinder there ſtands another of the ſame length, and is fixed to the under one by ſcrews; each of theſe cylinders have a piſton made tight, which work up and down with very little friction; theſe piſtons are connected with each other by a ſmooth bolt, (they being well ſcrewed to its ends) paſſing through the bottom of the upper cylinder; the lower cylinder acts as a pump, which draws water from the river through the tube and valve before deſcribed; the return of the piſton forces it through the trunk before-mentioned, and out near the ſtern of the boat. The upper cylinder acts as a ſteam-engine, and receives its ſteam from a boiler under its piſton, which piſton is then carried up to the top of the cylinder by the ſteam; at the ſame time, the piſton of the lower cylinder is brought up to its top, from its connection with the upper piſton, by the aforeſaid bolt; at which time they ſhut up the communication from the boiler, and open another to diſcharge the ſteam for condenſation; by this means the atmoſphere acts upon the piſton of the upper cylinder, and its force is conveyed to the piſton in the lower cylinder, by the aforeſaid connecting bolt; which forces the water, then in the lower cylinder, through the trunk, with conſiderable velocity; the re-action whereof, on the other end of the trunk, is the power which drives the boat forward.

To prove the Uſe of the Trunk.

IT is well known that any heavy body falling near the earth, will paſs through a ſpace of about fifteen feet in the firſt ſecond of time; if the ſame body was acted upon in a horizontal direction, by an impulſe equal to its weight, it would move in that direction the ſame diſtance in an equal time; it follows then, that the water in the trunk, will have the effect proportionable to its weight, of retarding the water from being diſcharged from the cylinder in too ſhort a time; to prevent the water, which after the ſtroke, moves rapidly out of the trunk, from retarding the forward motion of the boat, by its velocity.

There is a valve near the cylinder, on the top of the trunk, to admit air, which follows the water that is in motion, and gives time for the water to riſe gradually into the trunk through valves, at its bottom, for that purpoſe; this water has little or no motion with reſpect to the boat, and is therefore capable of reſiſting the next ſtroke of the engine.

Thus I have laid the principles of my boat before the public, and can aſſure them, by the wonderful force of ſteam, iſſuing in incredible quantities, from an entirely new conſtructed boiler, no doubt remains, but all the advantages which I have before-

mentioned,

mentioned, both with reſpect to navigation and the raiſing of water, will be produced. The one I have actually proved, by a loaded boat being propelled againſt a ſtream with the velocity of four miles in an hour, in the preſence and to the great ſatiſfaction of numerous ſpectators, and the other by models now ready to be produced, which admit not of contradiction.

If the public think theſe inventions, which muſt be productive of the greateſt uſefulneſs, worthy their patronage, I cannot fear but an excluſive right will be granted me by the different Aſſemblies of the United States, for a given number of years, which they ſhall think right, for the erecting theſe machines of my own invention, to compenſate me for the trouble, for the time, for the expence and for the fatigue which they have coſt me.

If a committee of experimental philoſophers ſhould be appointed in each ſtate, to examine me, it would give me infinite pleaſure to attend, and convince them of the practicability of all I have propoſed; of the ſimplicity of my machines, and of the ſmallneſs of their expence.

I am with great reſpect,
the Public's moſt devoted,
and obedient humble ſervant,
JAMES RUMSEY.

Berkeley County, Virginia, January 1, 1788.

Berkeley County, ſſ.

WE, the ſubſcribers, Juſtices of the Peace for the county aforeſaid, do certify, that the annexed affidavits, certificates and extracts of letters have been examined by us, and are true copies from the originals.

JOHN KEARSLEY,
December 28, 1787. CATO MOORE.

Virginia, Berkeley County, ſſ.

L. S.

I, MOSES HUNTER, Clerk of the ſaid county, do hereby certify, that John Kearſley and Cato Moore, Gentlemen, who have ſubſcribed the above certificate, were at that time, and ſtill are, Juſtices of the Peace for ſaid county, and that all due faith and credit is and ought to be given to all probates by them ſo ſigned, as well in Juſtice Courts as thereout. In teſtimony whereof, I have hereunto ſet my hand, and affixed the ſeal of the ſaid county, this 29th. day of December, 1787.

MOSES HUNTER.

CER-

CERTIFICATES, &c.

No. 1.

Berkeley County, Vir. ſſ.

ON Monday, December 3, 1787, I was requeſted to ſee an experiment on Potowmack river, made by Mr. JAMES RUMSEY's Steam Boat, and had no ſmall pleaſure to ſee her get on her way, with near half her burthen on board, and move againſt the current at the rate of three miles per hour, by the force of ſteam, without any external application whatever. I am well informed, and verily believe, that the machine at preſent is very imperfect, and by no means capable of performing what it would do if completed: I have not the leaſt doubt but it may be brought into common and beneficial uſe, and be of advantage to all navigations, as the machine is ſimple, light and cheap, and will be exceedingly durable, and does not occupy a ſpace in the boat of more than four feet by two and a half.

HORATIA GATES,
Late Major General in the Continental Army.

No. 2.

Berkeley County, Vir. ſſ.

On Monday, December 3, 1787, I was requeſted to ſee an experiment on Potowmack river, made by Mr. JAMES RUMSEY's Steam Boat, and had no ſmall pleaſure to ſee her get under way with near half her burthen on board, and move againſt the current at the rate of three miles per hour, by the force of ſteam, without any external application whatever: I am well informed, and do verily believe, that the machine at preſent is very imperfect, and by no means capable of performing what it would do if completed: I have not the leaſt doubt but it may be brought into common and beneficial uſe, and be of great advantage to all navigations, as the machine is ſimple, light and cheap, and will be exceedingly durable, and does not occupy a ſpace in the boat more than four feet by two and a half.

ROBERT STUBBS,
Teacher of the Academy in Shepherd's-Town.

Berkeley County, Vir. ſſ.

The Rev. Robert Stubbs, Gent. Teacher of the Academy at Shepherd's-Town, acknowledged before us, magiſtrates for ſaid county, that he did ſubſcribe the above writing.

Given under our hands, 14th. Dec. 1787.

CATO MOORE,
JOHN KEARSLEY.

No. 3.

No. 3.

Berkeley County, Vir. ſſ.

Being requeſted to ſee an experiment made by Mr. JAMES RUMSEY's Steam Boat, on Potowmack river, on Monday, the 3d. of December, 1787, it was with great pleaſure that we ſaw her get under way, with two tons on board, excluſive of her machinery, and move againſt the current at the rate of three miles an hour, by the force of ſteam, without any external application whatever: We are well informed, and believe, that the machinery at preſent is very imperfect, and by no means capable of performing what it would do if completed. We are perſuaded it may be brought into common and beneficial uſe, and be of great advantage to all navigations, as the machine is ſimple, light and cheap, and does not occupy a ſpace in the boat of more than four feet by two and a half.

ABRAHAM SHEPHERD, JOHN MORROW,
WILLIAM BRICE, HENRY BEDINGER,
DAVID GRAY, THOMAS WHITE.
CHARLES MORROW,

Berkeley County, Vir. ſſ.

Perſonally appeared before us, John Kearſley and Cato Moore, Juſtices of the Peace for the county aforeſaid, the ſundry ſubſcribers to the above certificate, who are all gentlemen of reputation, and by us ſuppoſed to be competent judges of what they have ſet forth, and they acknowledge the ſame to be their voluntary act; we were likewiſe preſent at the exhibition, and certify the truth of the above certificate.

Given under our hands this 13th. of December, 1787.

JOHN KEARSLEY,
CATO MOORE.

No. 4.

Berkeley County, Vir. ſſ.

Being requeſted to attend an experiment made by Mr. JAMES RUMSEY with his Steam Boat, on Potowmack river, on Tueſday the 11th. day of December, 1787, it was with great pleaſure we ſaw her advance againſt the current, with about three tons on board, at the rate of four miles an hour, without an oar, or any thing but the force of ſteam, either to generate or aſſiſt the motion—if the machinery had been in good order, we have reaſon to believe, ſhe would have gone much faſter; and as the machine is light and cheap, we are well perſuaded that it may be of great advantage in navigation.

MOSES HOGE, BENEM SWEARINGEN,
CORNEL. WYNKOOP, JOHN MORROW,
JOHN MARK, JOS. SWEARING.

N. B.

N. B. We think the machinery does not weigh more than ſix or ſeven hundred weight, and is not included in the burthen mentioned above.

Berkeley County, Vir. ſſ.

Perſonally appeared before us, two of the Juſtices of the Peace for the county aforeſaid, the ſundry ſubſcribers to the above certificate, who are all gentlemen of reputation, and by us ſuppoſed to be competent judges of what they have ſet forth; and they acknowledge the ſame to be their voluntary act. December 13th. 1787.

CATO MOORE,
JOHN KEARSLEY.

N°. 5.

Berkeley County, Vir. ſſ.

Being requeſted to ſee an experiment made by Mr. JAMES RUMSEY's Steam Boat, on Potowmack river, on Thurſday the 11th. of December, 1787, it was with great pleaſure that we ſaw her get under way, with upwards of three tons on board, and move againſt the current at the rate of four miles an hour, by the force of ſteam, without any external application whatever: We are well informed, and believe, that the machinery at preſent is very imperfect, and by no means capable of performing what it would do if completed; we are perſuaded that it may be brought into common and beneficial uſe, and be of great advantage to navigation, as the machine is ſimple, light and cheap, and does not occupy a ſpace of more than four feet by two and a half.

CHARLES MORROW, ABRA. SHEPHERD,
THOMAS WHITE, HENRY BEDINGER,
ROBERT STUBBS,

Berkeley County, Vir. ſſ.

Perſonally appeared before us, two of the Juſtices of the Peace for the county aforeſaid, the ſundry ſubſcribers to the above certificate, who are all gentlemen of reputation, and by us ſuppoſed to be competent judges of what they have ſet forth, and they acknowledge the ſame to be their voluntary act.

Given under our hands, this 14th. December, 1787.

CATO MOORE,
JOHN KEARSLEY.

N°. 6.

Berkeley County, Vir. ſſ.

The Affidavit of WILLIAM ASKEW, of Berkeley county, and ſtate of Virginia, ſheweth, That he was in the city of Philadelphia, as well as he remembers, in the month of September laſt, when he had an opportunity of ſeeing what is called the Steam-

Boat

Boat, ſaid to be conſtructed by Mr. FITCH; on taking a view of which boat, (and from the information of a gentleman, who appeared to be concerned in the ſaid machine) this deponent is of opinion, that the boiler will hold five hundred gallons of water. From what he was informed, by the gentleman aforeſaid, and from his own view, his opinion is, that the machinery of Mr. FITCH's Boat, on a moderate calculation, will, on its preſent conſtruction weigh ſeven tons, excluſive of the quantity of wood neceſſary for the boiler. This deponent further ſaith, that he verily believes the machinery of Mr. FITCH's ſteam-boat muſt neceſſarily coſt three hundred pounds.—This deponent hath lately ſeen the ſteam-boat conſtructed by Mr. JAMES RUMSEY, of Berkeley county, Virginia, and believes from good information, as well as his own opinion on examination, that Mr. RUMSEY's ſteam machinery will not, on its preſent conſtruction, weigh more than eight hundred pounds and may be worked with a very inconſiderable quantity of wood, or coals, perhaps not more coals in twelve hours that four buſhels; and that Mr. RUMSEY's boiler need have no more water, at one time, than one pint, or perhaps not ſo much, to keep the machinery in ſufficient motion to ſtem the ſtream of a river, ſufficiently faſt to be ſafe with a cargo of goods. This deponent is well convinced that the whole of Mr. RUMSEY's machinery may be made for twenty pounds, nor will it occupy more room in a boat that four barrels of flour.

Berkeley County, Vir. ſſ.

This day Mr. WILLIAM ASKEW came before me, and made oath, that the above teſtimony as far as came within his own knowledge, is true, and ſo he believes is the information he received from others. Sworn before me, December 8th. 1787.

JAMES WILSON.

N° 7.

Berkeley County, Vir. ſſ.

TO WHOM IT MAY CONCERN,

On application of Mr. JAMES RUMSEY and ſundry other gentlemen, requeſting my opinion, whether Mr. FITCH's or Mr. RUMSEY's Steam Boat, agreeably to the preſent different plans of working each boat, would be of the greateſt public utility; I have, at their importunities, conſented, (as far as my knowledge of the matter will admit) to give my opinion, without reſerve, to the beſt of my judgment; and, as I have ſeen both Mr. FITCH's and Mr. RUMSEY's ſteam-boats, with the machinery, or at leaſt ſo much thereof as could be obſerved, by a common examination, I preſume that Mr. RUMSEY's plan is much the moſt elegible, ſimple and practicable. Mr. FITCH's machinery appears bulky, weighty and complicated, leaving little room in the boat in which I ſaw it for loading. The weight of the whole

apparatus

apparatus I ſuppoſe to be five tons—whereas the whole of Mr. RUMSEY's machinery, at the time of exhibiting publicly, with every apparatus complete, could not weigh more than five hundred pounds.

It is obvious, therefore, that a machine weighing one twentieth only, and of ſmall ſize, comparative with the other, and by many degrees leſs complicated, muſt prove of the greateſt public utility, and will be practiſed in preference to the other.

I do therefore give it as my opinion, that Mr. RUMSEY's plan is to be preferred to Mr. FITCH's.

Given under my hand, at Shepherd's-Town, this 6th. day of December, 1787.

HENRY BEDINGER,

Berkeley County, Vir. ſſ.

Captain Henry Bedinger acknowledged before us, Magiſtrates for the ſaid county, that he ſubſcribed the above writing. Given under our hands, this 14th. day of Dec. 1787.

CATO MOORE,
JOHN KEARSLEY,

Berkeley County, Vir. ſſ.

We, the ſubſcribers, have been long acquainted with the within mentioned Capt. HENRY BEDINGER, and have ever found him a worthy honeſt gentleman.

HORATIA GATES,	CHARLES MORROW,
THOMAS WHITE,	JOHN MARK,
JOHN MORROW,	ROBERT STUBBS,
BENONI SWEARINGEN,	JOS. SWEARINGEN,
ABRAHAM SHEPHERD,	JOHN KEARSLEY.

December 14, 1787.

Berkeley County, Vir. ſſ.

The above gentlemen, who are all of good fame, ſubſcribed the above certificate in my preſence. Given under my hand, this 14th. December, 1787.

CATO MOORE.

No. 8.

Berkeley County, Vir. ſſ.

This day came GEORGE ROOTES, before me, one of the Juſtices of the Peace for the county aforeſaid, and made oath, that Mr. JAMES RUMSEY informed him, in the year 1784, that he was projecting a boat to work with ſteam, and the ſaid George has heard, and verily believes, that the ſaid Mr. RUMSEY, from the time of his leaving the agency of the Potowmack Company, has purſued his intention of perfecting his ſteam-engine for that purpoſe with unremitted attention, which the ſaid George is informed is now in great forwardneſs. Given under my hand, this 24th. day of November, 1787.

WILLIAM LITTLE.

No. 9.

No. 9.

Berkeley County, Vir. ſſ.

This day came Mr. CHARLES MORROW, before me, one of the Juſtices of the Peace for the ſaid county, and made oath, that in the beginning of the year 1785, Mr. JAMES RUMSEY told him, that by making uſe of ſteam he could raiſe WATER for MILLS, and that he would do it as ſoon as he had completed his ſteam-boat.

CHARLES MORROW.

Sworn to, and ſubſcribed before me, this 13th of December, 1787.

JOHN KEARSLEY.

No. 10.

Berkeley County, Vir. ſſ.

This day came NICHOLAS ORRICK, before me, one of the Juſtices of the Peace for the county aforeſaid, and made oath, that Mr. JAMES RUMSEY informed him, in the year 1784, that he was projecting a boat to work with ſteam, aud that he the ſaid Nicholas doth know that the ſaid Mr. RUMSEY from that time has purſued his intention of perfecting his ſteam-engine for that purpoſe, and the ſaid Nicholas has been on board of the ſaid RUMSEY's boat, when going by the power of ſteam, and has reaſon to believe it may anſwer a valuable purpoſe when completed. Given under my hand, this 24th. day of November, 1787.

WILLIAM LITTLE.

No. 11.

Berkeley County, Vir. ſſ.

This day came CHARLES MORROW, before me, one of the Juſtices of the Peace for the aforeſaid county, and made oath, that in the courſe of the ſummer 1785, Mr. JAMES RUMSEY had a boat built near the town of Bath; that early in the fall he had her brought down the river to Shepherd's-Town, and ſhortly after Mr. JOSEPH BARNS was ſent to Baltimore, in order to have ſome machinery caſt; that he then underſtood the boat was to be propelled by ſteam; that ſhortly after Mr. BARNS returned from Baltimore he was ſent to Frederick-Town, in order to have ſome other things made, agreeable to Mr. RUMSEY's directions, and thinks he returned from thence about the middle of November; that the ſaid Charles then ſaw the machinery Mr. BARNS had got made, viz. a boiler, two cylenders, pumps, pipes, &c. That about the firſt of December it appeared to the ſaid Charles, that the whole of the machinery was ready to be fixed to the boat, which came down to the Falls of Shanadoah for experiment, but the ice then commencing prevented it for the winter.

That

That in the winter Mr. RUMSEY told him he had made ſundry improvements; in particular, that he had invented an entirely new conſtructed boiler; that the ſaid Rumſey ſent to a forge for iron, and ſet two ſmiths to work, with directions how to make it; but when it was ready to be put together, he found, upon examination, that the workmanſhip was ſo badly executed, that it would not anſwer the purpoſe; he therefore concluded to try an experiment with his old boiler; and the ſaid Charles ſays, that Mr. BARNS (Mr. Rumſey's principal mechanic) continued during the winter to execute the different improvements Mr. RUMSEY had made; in the ſpring, 1786, the machinery was put on the boat, and the firſt trial made, the ſaid Charles being on board; that ſhe went againſt the current until the ſteam eſcaped, by the then imperfectneſs of the machine. Upon an experiment made with the new boiler, the heat of the ſteam was ſo greatly increaſed, that it diſſolved the ſoft ſolder, which had been thought, and before had proved, ſufficient for cementing the ſundry parts of ſuch machines; and as hard ſolder was obliged to be uſed in the repairs, delays were neceſſarily created. July, 1787, Mr. Rumſey had his new conſtructed boiler repaired, which he, the ſaid Charles, conceives to be the moſt capital contrivance to make ſteam that can be invented; for when the machine is not at work, the whiſtling of the ſteam may be heard at leaſt half a mile; and he is convinced that it does not hold more than three gallons of water; and the ſaid Charles further ſaith, that Mr. Rumſey has for ſeveral years ſteadily purſued his boat ſcheme, to the total neglect of every other kind of buſineſs which has very conſiderably injured his circumſtances, having Mr. Barns employed at five pounds per month, ſince the year eighty-five; and that he conceives the boat to be now near her completion: And the ſaid Charles has not a doubt but Mr. Rumſey is equal to the taſk of making her perform according to his original poſition.

CHARLES MORROW.

Sworn to and ſubſcribed before me, December 8th. 1787.

JOHN KEARSLEY.

No. 12.

Berkeley County, Vir. ſſ.

This day came Joſeph Barns before me, one of the Juſtices of the Peace for the ſaid county, and made oath, that he was employed by Mr. James Rumſey, in May, 1785, to build a boat on Potowmack river, near the town of Bath, and that he was then informed by the ſaid Rumſey, that the boat, when finiſhed, was to be propelled by ſteam, and that he had built the boat ſoon after (he thinks in September) he went, by the requeſt of Mr. Rumſey, to Baltimore, to get ſome machinary caſt for the boat; and in October and November, in Frederick town, he

got,

got, all the other machinery made for an experiment by ſteam: In December it was put on the boat, at Shanandoah Falls, but before it could be got ready for trial, the ice began to drive, which prevented it: Alſo, that Mr. Rumſey, during the winter, invented his new conſtructed boiler, and had it made ready to put together before the ſpring, but it was ſo badly executed, that he declined making the experiment with it, but propoſed to try his old boiler: Accordingly, in April, 1786, the experiment was made, and the boat went againſt the current of Potowmack; but many parts of the machine being imperfect, and and ſome parts rendered uſeleſs by the heat of the ſteam, he was obliged to have it repaired, which was done at the Great Falls, and ſhe was again tried, but failed in the repaired work, though it made many powerful ſtrokes before it failed, and ſent the boat forward with ſuch power, that one man was not able to hold her. The next experiment was attempted in December, with the new conſtructed boiler, but the violence of the heat was ſo great, from the ſteam, that it melted the ſoft ſolder that great part of the machine was put together with, and rendered it entirely uſeleſs, until repaired with hard ſolder; about this time, the ice drifting, carried off the boat which the machinery was made for, and deſtroyed her in ſuch a manner, that the repairing her was equal to one half the expence of building a new one: That the boat was, in the Spring, 1787, repaired, the machine alſo, and was ready for trial in September, when the boat moved up the river, againſt the current, with about two tons on board, beſides the machine, at the rate of two miles per hour; but the new boiler was ſo badly made, that it opened at ſeveral of its joints, which let great quantities of the ſteam eſcape: And the ſaid Barns further ſaith, that to his knowledge, the machine at the laſt trial, on December 3, 1787, was very imperfect in many parts, as the ſame boiler was then made uſe of, after receiving ſome repairs: It is his opinion it may be brought to anſwer very valuable purpoſes, as it will be ſimple, cheap, light, and durable, and may be applied to a ſhip of the largeſt ſize to advantage, having no external application whatever: And the ſaid Barns further ſaith, that Mr. Rumſey has, to his knowledge, injured his circumſtances very much, by quitting all kinds of buſineſs to purſue the boat; that he, the ſaid Barns, has received of the ſaid Mr. Rumſey five pounds per month, beſides his board, from April, 1785, to the preſent time; which, in his opinion, is but a ſmall part of the expences the ſaid Mr. Rumſey muſt have been at in the proſecuting his plan. His new conſtructed boiler muſt exceed every thing of that kind yet extant, as it will not hold more than twenty pints, and, in his opinion, will make more ſteam than a five hundred gallon boiler in the common way; and from the obſervation he has made, has reaſon to believe, that ſix buſhels of good coals will ſerve it for twelve hours.

The

The weight of the preſent machine is about ſeven hundred pounds, and will not occupy more ſpace than four barrels.

Sworn before me, this 10th. December, 1787.

CATO MOORE.

No. 13.

A PARAGRAPH from GENERAL WASHINGTON's Letter, in anſwer to mine of the 10th. of March, 1785.

"It gives me much pleaſure to find by your letter, that you are not leſs ſanguine in your BOAT PROJECT than when I ſaw you in Richmond, and that you have made ſuch further diſcoveries as will render them more extenſively uſeful than was at firſt expected. You have my beſt wiſhes for the ſucceſs of your plan."

No. 14.

ANNAPOLIS, December 18, 1787.

SIR,

In compliance with your requeſt, I mention the principle facts and circumſtances with which I am acquainted reſpecting your Steam Engine, and your expectation of its effect in boat navigation. I was entirely ignorant of the principle on which you were to gain your power, and your manner of applying it, till our return from the Great Falls together, in October or November, (but I think in October) 1785, when you told me that you relied on ſteam for your firſt power, and wiſhed me to promote you, having cylenders caſt at my brother's and my works; the attempt did not ſucceed—I conſidered myſelf under an obligation to ſecrecy till in the progreſs of making copper cylenders in Frederick-town ſome time after, when I found, that the deſigned purpoſe of the cylender was a ſubject of pretty general converſation.

Being on the committee appointed to conſider and report on Mr. Fitch's petition, I thought it my duty to mention what was in my memory, of your telling me of your having communicated your principle to General Waſhington, as I thought, though perhaps miſtakenly, at the time your model and experiment were exhibited before the General; and, with the approbation of the committee, wrote to the General on the ſubject: His anſwer, now before me, is to the effect, that "At that time, September 1784, nothing was intimated of ſteam: That the November following, in Richmond, you ſpoke to him of the effect of ſteam, and of the conviction you were under of the uſefulneſs of its application for the purpoſe of inland navigation," but the General ſeems to have thought it an immatured idea, that he did not then imagine you relied on.

Mr. Fitch having often mentioned the time (I think April, 1785) when the idea firſt ſtruck him, and yours being prior, the committee

committee could not report in favour of Mr. Fitch. The Gen. added in his anſwer, "It is proper for me herewith to add, that ſome time after this Mr. Fitch called on me, in his way to Richmond, and explaining his ſcheme, wanted a letter from me introductory to the Aſſembly of this (Virginia) ſtate; the giving of which I declined, and went ſo far as to inform him, that tho' I was enjoined not to diſcloſe the principles of Mr. Rumſey's diſcovery, yet, would venture to aſſure him, that he thought of applying ſteam was not original, but had been mentioned to me by Mr. Rumſey."

I eſteem myſelf no way competent to decide on Philoſophical or mechanical principles, but if you can ſimplify the ſteam-engine, render it cheap, and apply its powers to raiſe water in great quantities, for the purpoſes of agriculture and water-works of all kinds, or apply the powers more immediately, as has been much the ſubject of converſation between us at times, every man may eaſily perceive a vaſt field of improvement will thereby be opened, which I moſt ſincerely wiſh you may largely reap the good fruits of.

I am, Sir, your moſt obedient ſervent,

THOMAS JOHNSON.

No. 15.

Berkeley County, Vir. ſſ.

This day came Michael Bedinger, before me, one of the juſtices of the Peace for the ſaid county, and made oath, that Mr. James Rumſey informed him, in, or before the month of March, 1784, that he was of opinion that a boat might be conſtructed to work by ſteam, and that he intended to give it a trial, and mentioned ſome of the machinery that would be neceſſary to reduce it to practice; And the ſaid Michael further ſaith, that he ſet out for Kentuckey country immediately after in order to ſurvey ſome lands, and reſided there upwards of eighteen months, and that during the time of his ſtay there, he frequently mentioned Mr. Rumſery's boat ſcheme: He believes that he alſo mentioned, that it was to be wrought by ſteam.

The above was voluntarily ſworn to before me, by Captain Bedinger, who is a gentleman of reputation.

November 28, 1787.

JOHN KEARSLEY.

We, whoſe names are hereunto ſubſcribed, certify, that the within mentioned Michael Bedinger is a gentleman of reputation and veracity.

HORATIA GATES,
THOMAS WHITE,
JAMES KERNEY,
JOHN MORROW,
JOSEPH MITCHEL
CHARLES MORROW,
JOHN MARK,
PHIL. PENDLETON,
ROBERT STUBBS.

No. 16.

Berkeley County, Vir. ſſ.

TO WHOM IT MAY CONCERN.

I, Charles Morrow, of Shepherd's-Town, Berkeley county, commonwealth of Virginia, do certify, that late in the ſpring or beginning of ſummer, 1787, a certain —— ——, of Baltimore Town, formerly of this place, called at my houſe, when the converſation turned on Mr. Rumſey's Steam Boat and mechanical powers; he then told me, that before he had converſed with Mr. Rumſey, he conceived he new a great deal of theſe matters; but he now found he knew very little, and ſaid, "I muſt give up to Mr. Rumſey, he is my maſter." The truth of which ſhould Mr. —— deny (which I hardly think he will) I will at any time declare on oath. I do further certify, that Mr. Enoch Martin, of this county, informed me, that on Sunday, the 18th inſtant, he ſaw, in miniature, an engine at work in Baltimore town, which Mr. —— had made to raiſe water by ſteam; and that the ſaid —— told him he received the firſt inſight of that matter from Mr. Rumſey.

Given under my hand, this 13th December, 1787.

CHARLES MORROW.

Teſt.
DAVID GRAY,
JOSEPH BARNS.

No. 17.

Berkeley County, Vir. ſſ.

This day came Joſeph Barns before me, one of the Juſtices of the peace for the ſaid county, and made oath, that Mr. James Rumſey informed him, the year 1785, that he had contrived a very ſimple, cheap machine, to raiſe water by ſteam and the power of the atmoſphere. That ſome time (he thinks) in the month of June, 1787, a certain —— ——, of Baltimore-Town, formerly of Shepherd's-Town, did by ſome means, though it was not cuſtomary, inſinuate himſelf ſo as to be ſeveral times admitted into the ſhop where the ſteam-engine for the boat was making, aud then almoſt finiſhed; and the ſaid Barns further ſaith, he heard Mr. Rumſey inform the ſaid —— of his intention of raiſing water by ſteam, to work mills, as ſoon as he had accompliſhed his boat ſcheme, and then proceeded to explain to the ſaid —— the principles by which water might be raiſed, and alſo explained ſundry parts of the machinery, he believes all, except ſome valves and the opening and ſhutting of cocks by the machinery at the proper times; and the ſaid Barns well remembers, that during Mr. Rumſey's explanations, the ſaid —— ſeemed much aſtoniſhed, and declared that he never knew till then that the atmoſphere had any weight, or that ſteam had

had ſuch power; and that he then clearly ſaw the reaſon that a machine he had ſome time before invented to raiſe water, would not anſwer the purpoſe; and that it was ſo fooliſh a plan, he ſaid, he was aſhamed to explain it, And the ſaid Barns further ſaith, that Mr. Rumſey gave the ſaid —— a copy of his calculations of the force and velocity of water from under different heads, which he informed the ſaid —— would enable him to ſee the propriety of his calculations for raiſing water, by which he might eſtimate the quantity neceſſary to work a mill.

Berkeley County, Vir. ſſ.

The above-mentioned Joſeph Barns came perſonally before me, a magiſtrate for the ſaid county, and made oath, that the above writing contained the truth, and that there was an exact copy of the annexed calculation delivered to —— ——, by Mr. James Rumſey. Given under my hand, this 14th. day of Dec. 1787.

CATO MOORE.

We, the ſubſcribers, have been long acquainted with Mr. Joſeph Barns, aud ever found him to be a worthy honeſt man, and a man of truth.

ROBERT STUBBS,	CHARLES MORROW,
HEN. BEDINGER,	BENENI SWEARINGEN,
ABRA. SHEPHERD,	CORNEL WYNCOOP,
JOHN MARK,	THOMAS WHITE,
JOHN MORROW,	JOS. SWEARINGEN.

Berkeley County, Vir. ſſ.

The above gentlemen, who are all of good fame, ſubſcribed the above certificate in my preſence.

CATO MOORE.

*** The calculations alluded to in this affidavit were at firſt intended to be printed, its length determined the author to decline it—if —— ſhould deny he had ſuch a copy, it will be produced for the ſatisfaction of the public.

No. 18.

The underwritten is a paragraph of a letter written from a Mr. Daniel Buckley, living near Philadelphia, to a gentleman of Berkeley county, Virginia, and "Dr. Mc Mahon," who Mr. Buckley is ſo concerned for, is a partner with Mr. Rumſey in his ſteam-boat. 'Tis copied and annexed to prove how buſy Mr. Fitch has been in calumny, and how eaſily he found credit and propagators. Should he incline to aſſert hereafter, what credit he will deſerve has been ſo clearly proved, that future impoſitions may be avoided; and thoſe who ſpread a ſlander they do not believe, deſerve the contempt of all honeſt men.

"Pleaſe

179335

" Pleaſe to give my ſincere reſpects to Doctor Mc Mahon and his worthy lady—he is my moſt particular acquaintance, and truly I am ſorry he has been deluded by a perſon, who I have reaſon to believe is a deceiver, as Mr. Fitch, of Philadelphia, ſays, Mr. Rumſey got what ſmall knowledge he had of ſteam from him, but he retained the eſſentials, without which, he ſays, Mr. Rumſey cannot ſucceed."

We do certify that the above paragraph was taken from the aforeſaid letter, and copied in our preſence.

GEORGE ROOTES,
CHARLES MORROW.

☞ [The perſon's name omitted in republiſhing Mr. Rumſey's pamphlet; is, becauſe he has no connection with me, or my project, being a ſtranger, and probably innocent of the charges alledged.] *J. F.*

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